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TO:	From:
TO: Alton Pryor Location: REM 4A89 Art Unit: 1616 July 1, 2004 Case Serial Number: 10/617501	From: P. Sheppard Location: Remsen Building Phone: (571) 272-2529 sheppard@uspto.gov

Search Notes

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=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 11:52:15 ON 01 JUL 2004
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FILE COVERS 1907 - 1 Jul 2004  VOL 141 ISS 1
FILE LAST UPDATED: 30 Jun 2004  (20040630/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


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=> d stat que
L1           49 SEA FILE=REGISTRY ABB=ON  PLU=ON  DIKETONE?
L2        21774 SEA FILE=REGISTRY ABB=ON  PLU=ON  SULFUR/BI
L3              SEL  PLU=ON  L1 1- CHEM :     210 TERMS
L4        37613 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L3
L5        54254 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L4 OR ?DIKETONE?
L6       589911 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L2 OR ?SULFUR?
L7         1818 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6 AND L5
L9           28 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L7 AND (?ANESTHE? OR ?HISTAMIN
                E? OR ?CORTICOST? OR ?IRRITANT? OR ?CREAM? OR ?LOTION? OR
                ?OINTMENT? OR URGENT? OR ?ITCH?)
L10          18 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L9 NOT (FLAVOR? OR CREAM(W)BUT
                TER OR FOOD#)


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L10  ANSWER 1 OF 18  HCAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         2002:550896  HCAPLUS
DOCUMENT NUMBER:          137:267469
TITLE:                    Populations at risk
AUTHOR(S):                Pedersen, David H.; Young, Randy O.; Rose, Vernon E.
CORPORATE SOURCE:         National Institute for Occupational Safety and Health,
                          Cincinnati, OH, USA
SOURCE:                   Patty's Toxicology (5th Edition) (2001), Volume 8,
                          699-1080.  Editor(s): Bingham, Eula; Cohrssen,
                          Barbara; Powell, Charles H.  John Wiley & Sons, Inc.:
                          New York, N. Y.
                          CODEN: 69CWST; ISBN: 0-471-31943-0
DOCUMENT TYPE:            Conference
LANGUAGE:                 English
AB   The recognition and anticipation of potential occupational health
     problems, followed by assessment of occupational health risks based on
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chemical, phys., or biol. properties of toxic agents and their potential contact or exposure under use conditions, in the practice of industrial hygiene and toxicol. for worker populations at risk is discussed. Topics covered include: background (Industrial Classification, Occupational Classification Codes, Chemical Master, Facilities, Exposure, and Trade Named Ingredients files); data source considerations; data display considerations; calcn. and display of ests. (industry-specific exposure concentration by facility employment size, industry-specific exposure concns., all industries exposure concentration by facility employment size, summary estimate). An appendix displays information on the industrial distribution potential occupational exposures to >300 selected chemical agents or groups of agents in 290 tables.

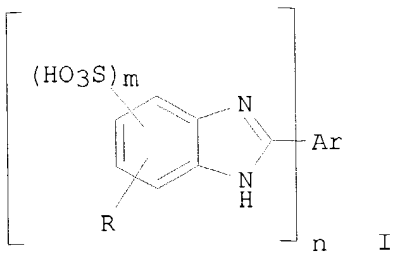
IT **123-42-2, 4-Hydroxy-4-methyl -2-pentanone 2551-62-4, Sulfur** hexafluoride **7446-09-5, Sulfur** dioxide, biological studies **7783-06-4,** Hydrogen sulfide, biological studies **10025-67-9, Sulfur** chloride
RL: ADV (Adverse effect, including toxicity); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
(industry-specific workplace populations at risk from exposure to or contact with toxic chemical agents)

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:9970 HCAPLUS
DOCUMENT NUMBER: 136:74314
TITLE: Preparation of 2-arylbenzimidazole sulfonic acids and their application as UV filters
INVENTOR(S): Heywang, Ulrich; Schwarz, Michael; Pfluecker, Frank
PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany
SOURCE: Eur. Pat. Appl., 20 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1167359	A1	20020102	EP 2001-115113	20010621
EP 1167359	B1	20040428		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
DE 10030664	A1	20020110	DE 2000-10030664	20000623
JP 2002053559	A2	20020219	JP 2001-186026	20010620
AT 265438	E	20040515	AT 2001-115113	20010621
US 2002013474	A1	20020131	US 2001-887265	20010625
US 6593476	B2	20030715		

PRIORITY APPLN. INFO.: DE 2000-10030664 A 20000623
OTHER SOURCE(S): MARPAT 136:74314
GI



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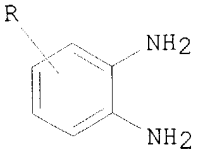

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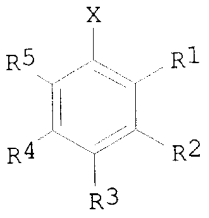


III

AB The invention concerns the synthesis of 2-aryllbenzimidazole sulfonic acids (I) by the reaction of o-phenylene diamine derivs. (II) with (III), R groups are defined, in the presence of activated **sulfuric** acid at 160-190°C; the products are used as UV filters in cosmetic compns. along with other UV filters. Thus 2-phenylbenzimidazole-4,6-disulfonic acid was prepared by the reacting o-phenylenediamine with benzoic acid in oleum containing **sulfuric** acid. A sunscreen spray was prepared from two phases, phase A contained (weight/weight%); Eusolex 2292 7.50; Eusolex HMS 7.00; Steareth-2 0.40; Steareth-10 0.80; Pemulen TR-2 0.18; Propylyene glycol isoceteth-3 acetate 5.00; dimethicone 1.00; Oxynex K 0.10. Phase B contained (weight/weight%): 2-phenylbenzimidazole-4,6-disulfonic acid 1.00; triethanol amine 0.90; 1,2-propanediol 2.00; preservative (0.05% propyl-4-hydroxybenzoate and 0.15% methyl-4-hydroxybenzoate) 0.50; water to 100.

IT **8014-95-7**, Oleum
RL: NUU (Other use, unclassified); USES (Uses)
(preparation of 2-arylbenzimidazole sulfonic acids and application as UV filters)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:	2002:9969 HCAPLUS
DOCUMENT NUMBER:	136:74313
TITLE:	Preparation of 2-phenylbenzimidazole sulfonic acids and their application as UV-B filters
INVENTOR(S):	Heywang, Ulrich; Schwarz, Michael; Pfluecker, Frank
PATENT ASSIGNEE(S):	Merck Patent G.m.b.H., Germany
SOURCE:	Eur. Pat. Appl., 17 pp. CODEN: EPXXDW
DOCUMENT TYPE:	Patent
LANGUAGE:	German
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

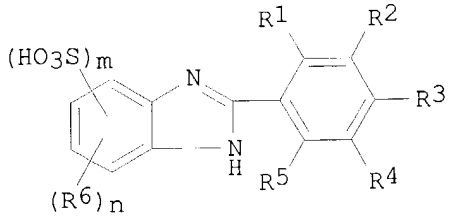
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

EP 1167358	A1	20020102	EP 2001-115094	20010621
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
DE 10030663	A1	20020110	DE 2000-10030663	20000623
JP 2002047275	A2	20020212	JP 2001-185703	20010620
US 2002016349	A1	20020207	US 2001-885967	20010622
US 2002055532	A1	20020509	US 2001-989172	20011121
US 6440401	B1	20020827		

PRIORITY APPLN. INFO.: DE 2000-10030663 A 20000623
US 2001-885967 A1 20010622

OTHER SOURCE(S): MARPAT 136:74313

GI



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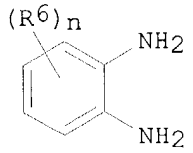

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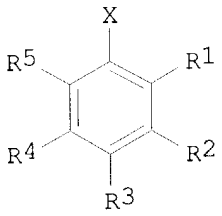

III

AB The invention concerns the synthesis of 2-phenylbenzimidazole sulfonic acids (I) by the reaction of o-phenylene diamine derivs. (II) with (III), R groups are defined, in the presence of activated **sulfuric** acid at 160-190°C; the products are used as UV-B filters in cosmetic compns. along with UV-A filters. Thus 2-phenylbenzimidazole-4,6-disulfonic acid was preparaed by reacting o-phenylenediamine with benzoic acid in oleum containing **sulfuric** acid. A sunscreen spray was prepared from two phases, phase A contained (weight/weight%); Eusolex 2292 7.50; Eusolex HMS 7.00; Steareth-2 0.40; Steareth-10 0.80; Pemulen TR-2 0.18; Propylyene glycol isoceteth-3 acetate 5.00; dimethicone 1.00; Oxynex K 0.10. Phase B contained (weight/weight%): 2-phenylbenzimidazole-4,6-disulfonic acid 1.00; triethanol amine 0.90; 1,2-propanediol 2.00; preservative (0.05% propyl-4-hydroxybenzoate and 0.15% methyl-4-hydroxybenzoate) 0.50; water to 100.

IT **8014-95-7**, Oleum
RL: NUU (Other use, unclassified); USES (Uses)
(preparation of 2-phenylbenzimidazole sulfonic acids and their application as UV-B filters)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:177721 HCAPLUS
DOCUMENT NUMBER: 135:10212
TITLE: Chemical applications of topology and group theory Part 35. Non-octahedral six-coordinate tris(dithiolene) and related complexes of the early transition metals
AUTHOR(S): King, R. B.

CORPORATE SOURCE: Department of Chemistry, University of Georgia, Athens, GA, 30602, USA
SOURCE: Journal of Organometallic Chemistry (2001), 623(1-2), 95-100
CODEN: JORCAI; ISSN: 0022-328X
PUBLISHER: Elsevier Science S.A.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Group theory forbids either Oh octahedral or D3h trigonal prismatic geometry for a six-coordinate early transition metal complex using a six-orbital sd5 manifold thereby indicating that the observation of trigonal prismatic rather than octahedral metal coordination geometry is not a simple indication of the lack of p orbital participation in the chemical bonding. However, an exptl. observed C3 geometry intermediate between octahedral and trigonal prismatic geometry is allowed by group theory for such an sd5 manifold. Bicapped tetrahedral geometry, which is related to octahedral or trigonal prismatic geometry through combinations of various diamond-square-diamond processes, is also found in a few metal tris(dithiolenes) having saturated or benzenoid bridges between the donor **sulfur** atoms. The distortion of an octahedron to a trigonal prism in six-coordinate complexes of d<4 early transition metals can result from a second-order Jahn-Teller effect involving splitting of the t1u HOMO and the t2g LUMO in order to allow mixing of the resulting e' orbitals in the trigonal prismatic geometry. This effect is favored when the ligands are strong σ-donors but weak π-donors and the metal is not too electropos. such as is the case with many metal tris(dithiolenes). The MS2C2 chelate rings in metal tris(dithiolene) complexes may be regarded as resonance hybrids of ethylenedithiolate and **dithiodiketone** canonical forms having different metal oxidation states. The stereochem. non-rigidity of trigonal prismatic metal tris(dithiolenes) observed exptl. by NMR requires interchange of the ligands on the top and bottom rings of the trigonal prism so that a simple trigonal twist through an octahedral intermediate is not adequate to account for this observation. A 'rotary elec. **switch**' mechanism has been proposed for this process but rearrangement mechanisms through bicapped tetrahedral intermediates also appear reasonable.

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:493550 HCAPLUS
DOCUMENT NUMBER: 133:101736
TITLE: A reagent system and method for increasing the luminescence of lanthanide(iii) macrocyclic complexes
INVENTOR(S): Leif, Robert C.; Vallarino, Lidia
PATENT ASSIGNEE(S): USA
SOURCE: PCT Int. Appl., 96 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000042048	A1	20000720	WO 2000-US1211	20000118
W: CA, CH, DE, FI, GB, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2360054	AA	20000720	CA 2000-2360054	20000118
EP 1150985	A1	20011107	EP 2000-905653	20000118
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

US 6340744	B1	20020122	US 2000-484670		20000118
US 2002132992	A1	20020919	US 2001-10597		20011206
US 6750005	B2	20040615			
PRIORITY APPLN. INFO.:			US 1999-116316P	P	19990119
			US 2000-484670	A1	20000118
			WO 2000-US1211	W	20000118

OTHER SOURCE(S): MARPAT 133:101736

AB Disclosed are a spectrofluorimetrically detectable luminescent composition and processes for enhancing the luminescence of one or more lanthanide-containing macrocycles. The luminescent composition comprises a micelle-producing amount of at least one surfactant, at least one energy transfer acceptor lanthanide element macrocycle compound having an emission spectrum peak in the range from 500 to 950 nm, and a luminescence-enhancing amount of at least one energy transfer donor compound of yttrium or a 3-valent lanthanide element having atomic number 59-71, provided that the lanthanide element of said macrocycle compound and the lanthanide element of said energy transfer donor compound are not identical. The addition of gadolinium(III) in the presence of other solutes to both the prototype and the difunctionalized europium, samarium, and terbium macrocyclic complexes, which were taught in our U.S. patents #5,373,093 and #5,696,240, enhances their luminescence. Similar enhancements of luminescence also results for the mono-functionalized europium, samarium, and terbium macrocyclic complexes, which were taught in our U.S. patent #5,696,240. The enhanced luminescence afforded by the composition enables the detection and/or quantitation of many analytes in low concns. without the use of expensive, complicated time-gated detection systems.

IT **7704-34-9, Sulfur**, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(reagent system and method for increasing luminescence of lanthanide(iii) macrocyclic complexes)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:	1996:148648 HCAPLUS
DOCUMENT NUMBER:	124:281291
TITLE:	Skin irritation: reference chemicals data bank
AUTHOR(S):	Bagley, D. M.; Gardner, J. R.; Holland, G.; Lewis, R. W.; Regnier, J. F.; Stringer, D. A.; Walker, A. P.
CORPORATE SOURCE:	Colgate Palmolive Co., Piscataway, NJ, 08855-1343, USA
SOURCE:	Toxicology in Vitro (1996), 10(1), 1-6 CODEN: TIVIEQ; ISSN: 0887-2333
PUBLISHER:	Elsevier
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB A list of 176 chems., all of high or constant purity and stable on storage, has been developed using available comprehensive in vivo rabbit skin irritation data. No new in vivo testing was conducted to qualify a chemical for inclusion in the list. The chems. were tested undiluted in vivo studies, apart from those chems. where high concns. could be expected to cause severe effects. The in vivo data were generated in studies carried out since 1981 according to OECD Test Guideline 404 and following the principles of Good Laboratory Practice. The data were obtained from tests normally using at least three rabbits evaluated at the same time, involving application of 0.5 g or 0.5 mL to the flank under semi-occlusive patches for 4 h, and in which observations were made at least 24, 48 and 72 h after removal of the patch. The chems. represent a range of chemical classes [acids, acrylates/methacrylates, alcs., aldehydes, alkalis, amines, brominated derivs., chlorinated solvents, esters, ethers, fatty acids and mixts., fragrance oils, halogenated aroms., hydrocarbons (unsatd.), inorgs., ketones, nitriles, phenolic derivs., S-containing compds., soaps/surfactants, triglycerides] and different degrees of irritancy. They are ranked for skin irritation potential on the basis of a 'primary

irritation index. These chems. could be used in validation tests of promising alternatives to the in vivo rabbit skin irritation/corrosion test. This is an essential step in the progression to regulatory acceptance of alternative procedures.

IT **431-03-8, Diacetyl 7704-34-9D, Sulfur**
, compds.
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(skin irritation - reference chems. data bank)

L10 ANSWER 7 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:634751 HCAPLUS
DOCUMENT NUMBER: 123:14301
TITLE: Hydrometallurgical recovery of gold using heterocyclic aromatic compounds containing nitrogen or **sulfur**
INVENTOR(S): Kristjansdottir, Sigridur Soley; Thompson, Jeffery Scott
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE: PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9511319	A1	19950427	WO 1994-US11047	19941006
W: AU, BR, CA, CN, GE, KG, KZ, NZ, RU, TJ				
RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5484470	A	19960116	US 1994-281966	19940728
ZA 9407746	A	19960404	ZA 1994-7746	19941004
CA 2171715	AA	19950427	CA 1994-2171715	19941006
AU 9480121	A1	19950508	AU 1994-80121	19941006
AU 677450	B2	19970424		
CN 1133617	A	19961016	CN 1994-193882	19941006
BR 9407860	A	19970520	BR 1994-7860	19941006
RU 2114926	C1	19980710	RU 1996-109466	19941006
PRIORITY APPLN. INFO.:			US 1993-140803 A	19931021
			US 1994-281966 A	19940728
			WO 1994-US11047 W	19941006

AB The dissoln. of Au in a bath containing an oxidant and ligand is improved by the catalytic addition of heterocyclic aromatic compds. containing N or S in the ring. The process is suitable for improved Au recovery from ores by leaching with cyanide, hypochlorite, or other solns. in the presence of the catalytic addns. The Au dissoln. by aqueous 0.1% NaOCl-2.5% NaCl solution at pH 8.5 is improved in the presence of 2,3-lutidine to 8.1 μg/cm2-h, with no leaching in the absence of activator.

IT **492-73-9, 2,2'-Pyridil**
RL: CAT (Catalyst use); USES (Uses)
(leaching promoter; gold leaching enhanced with heterocyclic aromatic compds. containing nitrogen or **sulfur**)

IT **7704-34-9D, Sulfur**, heterocyclic ring compds.
RL: CAT (Catalyst use); USES (Uses)
(leaching solution containing; gold leaching enhanced with heterocyclic aromatic compds. containing nitrogen or **sulfur**)

L10 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1994:662443 HCAPLUS
DOCUMENT NUMBER: 121:262443
TITLE: French limiting values for occupational exposure to

chemicals
AUTHOR(S): Anon.
CORPORATE SOURCE: Fr.
SOURCE: Cahiers de Notes Documentaires (1993), 153, 557-74
CODEN: CNDIBJ; ISSN: 0007-9952
DOCUMENT TYPE: Journal
LANGUAGE: French
AB Limit values (suggested limiting values and maximum permissible values) for occupational exposure to chems., including carcinogens, which have been published by the French Labor Ministry are presented in one table. This table is preceded by information on the following points: monitoring of workplace atmospheres (sampling and anal.; aerosols); permitted values (definitions and aims; additivity convention; elements and compds.; limiting occupational exposure values; carcinogens); mandatory values; and values recommended by the French National Health Insurance Fund (CNAM).
IT **123-42-2, Diacetone alcohol 2551-62-4**
2699-79-8, Sulfuryl fluoride **7446-09-5,**
Sulfur dioxide, biological studies **7783-06-4,** Hydrogen
sulfide, biological studies
RL: ADV (Adverse effect, including toxicity); POL (Pollutant); BIOL (Biological study); OCCU (Occurrence)
(occupational exposure; occupational exposure and stds. for limiting workplace concns. of chems. in France)

L10 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:65829 HCAPLUS
DOCUMENT NUMBER: 118:65829
TITLE: Air contaminants
CORPORATE SOURCE: Occupational Safety and Health Administration, U. S. Dep. Labor, Washington, DC, 20210, USA
SOURCE: Federal Register (1992), 57(114, Bk. 2), 26002-601, 12 Jun 1992
CODEN: FEREAC; ISSN: 0097-6326
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Proposed amendments of existing air contaminant stds. for the maritime and construction industries and extension of air contaminant stds. to agricultural employees (only employees of farms with >10 nonfamily employees are covered) are given under the Federal Occupational Safety and Health Administration. Tables that indicated transitional limits, based on established threshold limit values, indication of skin protection needs, proposed time-weighted average exposure (any 8-h work shift for 40-h week), short-term exposure limit (15-min time-weighted average), ceiling (exposure during any part of the work day, or if instantaneous monitoring is not feasible, the 15-min time-weighted average), and/or skin protection needs are given for the shipyard, marine terminal and longshoring, construction, and agricultural industries. Extensive data on health effects of the substances to be regulated and preliminary regulatory impact analyses are given for general industry and the specific industrial sectors.
IT **123-42-2, Diacetone alcohol 2551-62-4**
, **Sulfur** hexafluoride **2699-79-8, Sulfuryl**
fluoride **7446-09-5, Sulfur** dioxide, biological studies
7719-09-7, Thionyl chloride **7783-06-4,** Hydrogen sulfide,
biological studies **7783-60-0, Sulfur** tetrafluoride
10025-67-9, Sulfur monochloride **10546-01-7,**
Sulfur pentafluoride
RL: ADV (Adverse effect, including toxicity); POL (Pollutant); BIOL (Biological study); OCCU (Occurrence)
(exposure limits to airborne, in agricultural and construction and maritime industries, stds. for)

L10 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1992:46305 HCAPLUS
DOCUMENT NUMBER: 116:46305
TITLE: Chemical warfare agent decontaminant composition containing an alkali metal salt of oximes, phenols, or PEG monoethers
INVENTOR(S): Bannard, Robert Alexander Brock; Casselman, Alfred Angus; Purdon, John Garfield; Mendoza, Celso Enriquez
PATENT ASSIGNEE(S): Canada, Minister of National Defence, Can.
SOURCE: Brit. UK Pat. Appl., 29 pp.
CODEN: BAXXDU
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2239598	A1	19910710	GB 1987-6494	19870319
GB 2239598	B2	19911030		
CA 1321950	A1	19930907	CA 1986-521284	19861024
US 5071877	A	19911210	US 1989-364671	19890411
WO 9207627	A1	19920514	WO 1990-CA424	19901102
W: NO				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
EP 555208	A1	19930818	EP 1990-917381	19901102
EP 555208	B1	19950607		
R: BE, CH, DE, DK, FR, IT, LI, SE				
NO 9301579	A	19930702	NO 1993-1579	19930430

PRIORITY APPLN. INFO.:
CA 1986-521284 19861024
US 1987-26396 19870224
US 1988-259978 19881005
WO 1990-CA424 19901102

AB A decontamination **cream** or **lotion** comprises an alkali metal salt of certain oximes, phenols, or PEG monoethers dispersed in a substantially anhydrous state in a base medium comprising a PEG which has been partially etherified to reduce the free OH group content. These compns. are effective against chemical warfare agents such as nerve agents and mustard gas. Base **cream** MG2 (PEG 550 monomethyl ether 50, PEG 1900 monomethyl ether 50 weight%) provided significant levels of protection against HD challenge. When MG2 contained 1.25 M K acetophenone oximate or K **2,3-butanedione** monoximate, the **cream** provided high levels of protection against HD, VX, and GD.

IT **505-60-2**, HD
RL: BIOL (Biological study)
(protection against and decontamination of, alkali metal salts of phenols or oximes or PEG ether in **cream** or **lotion** for)

L10 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1991:499344 HCAPLUS
DOCUMENT NUMBER: 115:99344
TITLE: Phenol or oxime salt-containing potective composition against chemical warfare agents
INVENTOR(S): Bannard, Robert Alexander Brock; Casselman, Alfred Angus; Purdon, John Garfield; Bovenkamp, John William
PATENT ASSIGNEE(S): Canada, Minister of National Defence, Can.
SOURCE: Brit. UK Pat. Appl., 13 pp.
CODEN: BAXXDU
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2237739	A1	19910515	GB 1985-7544	19850322
GB 2237739	B2	19911030		

PRIORITY APPLN. INFO.: GB 1985-7544 19850322

AB The title composition comprises: (a) an alkali metal salt of phenol, acetophenone oxime, acetone oxime or **2,3-butanedione** monoxime; (b) 18-crown-6 or cyptand-[2,2,2]; and (c) a solvent (dioxolane, dimethoxyethane, polyethylene glycols and polyethylene glycol mono- and di-ethers), together with, if necessary, water in an amount just sufficient to ensure that the alkali metal salt is in solution Such compns. can be formulated as **creams** and used on the skin. A **cream** was formulated from 0.625M K phenoxide in PEG-750 mono Me ether, containing 18-crown-6. The amts. of phenoxide and 180-crown-6 were equimolar. Applied as a 1 mm film, the **cream** prevented mustard gas penetration in vitro.

IT **505-60-2**, Mustard gas
RL: BIOL (Biological study)
(protectants against, phenol or oxime salts-containing)

L10 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1991:487007 HCAPLUS
DOCUMENT NUMBER: 115:87007
TITLE: Efficacy of an oximate-based skin decontaminant against organophosphate nerve agents determined in vivo and in vitro
AUTHOR(S): Sawyer, Thomas W.; Parker, Deborah; Thomas, Norleen; Weiss, M. Tracy; Bide, Richard W.
CORPORATE SOURCE: Def. Res. Establ., Suffield/Ralston, AB, Can.
SOURCE: Toxicology (1991), 67(3), 267-77
CODEN: TXCYAC; ISSN: 0300-483X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Recent Canadian research efforts have been directed towards the development of a reactive skin decontaminant (RSD) **lotion** active against classical nerve agents and mustard. The formulation presently under study consists of a 1.25 m solution of potassium **2,3-butanedione** monoximate (KBDO) in polyethylene glycol Me ether 550. Although this formulation has shown good efficacy, concern has been expressed as to the potential toxicity of the reaction products of KBDO and organophosphate (OP) nerve agents. This report describes the high efficacy of this **lotion** in inactivating OPs as measured by the systemic toxicity of the OP/RSD mixts. in rats. In addition, primary cultures of chick embryo neurons were also used to test the efficacy of the RSD. By relating the anticholinesterase activity in these cultures of the OP/RSD mixture to that of pure OP stds., a sensitive measure of the value of the RSD in inactivating tabun, sarin, soman and VX was obtained. Expts. with all 4 nerve agents in this in vitro system provided a good correlation with the in vivo data, and also indicated that the inactivation process was time- and agent-dependent and also related to the ratio of OP to RSD.

IT **505-60-2**, Mustard gas
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(toxicity of, **butanedione** monooximate prevention against)

L10 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1989:218230 HCAPLUS
DOCUMENT NUMBER: 110:218230
TITLE: Air contaminants
CORPORATE SOURCE: United States Occupational Safety and Health Administration, Washington, DC, 20210, USA
SOURCE: Federal Register (1989), 54(12, Bk. 2), 2332-983, 19 Jan 1989

CODEN: FEREAC; ISSN: 0097-6326
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Under the Federal Occupational Safety and Health act, OSHA is amending existing air containment stds. and setting new permissible exposure limits for toxic substances commonly used in the workplace.
IT **123-42-2**, **Diacetone alcohol** **2551-62-4**, **Sulfur** hexafluoride **2699-79-8**, **Sulfuryl** fluoride **7446-09-5**, **Sulfur** dioxide, biological studies **7719-09-7**, Thionyl chloride **7783-06-4**, Hydrogen sulfide, biological studies **7783-60-0**, **Sulfur** tetrafluoride **10025-67-9**, **Sulfur** monochloride **10546-01-7**, **Sulfur** pentafluoride
RL: ADV (Adverse effect, including toxicity); POL (Pollutant); BIOL (Biological study); OCCU (Occurrence)
(air pollution by, occupational exposure to, stds. for, in USA)

L10 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1967:420710 HCAPLUS
DOCUMENT NUMBER: 67:20710
TITLE: Volatile components of raw chicken breast muscle
AUTHOR(S): Grey, T. C.; Shrimpton, D. H.
CORPORATE SOURCE: Low Temp. Res. Sta., Cambridge, UK
SOURCE: British Poultry Science (1967), 8(1), 23-33
CODEN: BPOSA4; ISSN: 0007-1668
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Major pectoral muscles were obtained from White Leghorn cockerels and Light Sussex hens aged 11-15 months. Minced samples of the raw muscle were heated at 50° in a special apparatus and the volatile components were collected in a trap placed in liquid O. Gas-liquid chromatog. was used for the fractionation and for the identification of the volatile components. A total of 14 components, which included acetaldehyde, 2-propanone, and 3-methyl-2-butanone, were identified in the muscle obtained from birds immediately following death. Birds which were stored uneviscerated at room temperature for 4 days yielded 21 components. By comparison with the fresh sample, in the stored sample EtOH increased 100-fold, 2-butanone increased 20-fold, and most of the other compds. increased 2-5-fold. The new compds. found in the stored sample were MeOH (in concns. comparable to EtOH), **2,3-butanedione**, hexanal, 4-methyl-pentanal, and 2-hexanone. From the cecum of the living bird, **anesthetized** with ether, the volatile components were collected in situ. Out of a total of 10, the components present in the largest amts. were ether, EtOH, and an unidentified carbonyl (I). In the sample obtained from the cecum 18 hrs. after death the relative concentration of most of the components was increased, the concentration of ether was decreased, and an addnl. 11 components were detected. The compds. present in the largest amts. were: I, EtOH, 5-methyl-hexanal, and hexanal. It is proposed that the volatile components present in the muscle may be classified in 2 groups depending upon their origin: those that are endemic, mainly carbonyl compds., and those that are adventitious, mainly thiols, sulfides, and alcs. The microflora present in the cecum may be a major metabolic source of the adventitious muscle components.
IT **431-03-8** **7783-06-4**, biological studies
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(in chicken, storage and)

L10 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1967:76559 HCAPLUS
DOCUMENT NUMBER: 66:76559

TITLE: Reaction of **sulfur** chlorides with polymers and monomers
INVENTOR(S): Akobjanoff, Lev
SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3296203		19670103	US	19580313

AB Treatment of unsatd. polymers and monomers with **sulfur** chlorides (I) (S_2Cl_2, SCl_2, or S_4Cl_2) produces maximum crosslinked polymers (hard resinous or plastic masses) by using 0.5 equivalent I/unsatn. and moderately crosslinked reactive polymers (polysulfenyl chlorides, usually viscous oil) by using >0.5 equivalent I. Thus, 160 g. SCl_2 in 800 ml. benzene was added to 100 g. pale crepe natural rubber in 2000 ml. benzene. The gelation times (min.) of the solution upon the addition of 4 g., 10 g., 32 g., 92 g., and 160 g., SCl_2/100 g. rubber were 80, 5, 0.1, 1, and ∞. The last composition remained dispersed indefinitely. On evaporation of the solvent, **cream**-colored, hard, more brittle than elastic depolymerizates were obtained. Similarly reacted were butyl rubber, cyclized rubber, turpentine, $CH_2(COMe)_2$, **diacetone alc** ., malonate, glycol, resorcinol, p-$C_6H_4(NH_2)_2$, sucrose, and urea. Treatment of a poly(sulfenyl chloride) with acetone, MeOH, nonenes, urea, and water gave similar products. The poly(sulfenyl chloride) of soybean oil was also treated with glycerol, $EtOCH_2CH_2OH$, pyridine, NH_3, and water to give leathery to rubbery products. The poly(sulfenyl chloride) of natural rubber can be used as a coating and binder for vulcanized rubbers.

IT **123-42-2**
RL: USES (Uses)
(reaction products with **sulfur** chloride (SCl_2))

IT **10025-67-9 10545-99-0 15731-86-9**
RL: USES (Uses)
(reaction products with unsatd. monomers and polymers, crosslinking and depolymn. in relation to)

L10 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1956:89208 HCAPLUS
DOCUMENT NUMBER: 50:89208
ORIGINAL REFERENCE NO.: 50:16774b-i,16775a-i,16776a-i,16777a-d
TITLE: Ethynylation. IV. Reactions of α-alkynols and γ-alkynediols
AUTHOR(S): Reppe, Walter; et al.
SOURCE: Ann. (1955), 596, 38-79
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 50:89208

AB Hydrogenation to unsatd. and saturated alcs. and glycols, hydration, addition of HCl and $NaHSO_3$, oxidation of VIa to $(HOCR_3R_4C.tplbond.C)_2$ (XXIIIc), esterification and etherification, and the preparation of amino- and haloalkynes are discussed. A selective catalyst (XXIV) for hydrogenation of VIa to olefinic alcs. is prepared by vacuum impregnating 1 kg. granular kieselguhr with solns. of 0.65 g. $PdCl_2$ and of 13 g. $FeCl_3$ each in 400 ml. H_2O, drying, boiling 1 l. 0.5 hr. with 500 ml. concentrated water glass solution and 2.5 l. H_2O, filtering (vacuum) after 12 hrs., drying at 100°, and reducing with H at 140-50°. XXIV contains 1.5% free alkali. Distillation of 500 g. condensate from passing 25% aqueous XX and H over XXIV at 140-50° gives a little EtCHO, a mixture (b. 80-92°) containing 110 g. $CH_2:CHCH_2OH$, 12 g. PrOH with 12% H_2O, and a trace of XX. Similarly prepared from the corresponding VIa are: $CH_2:CHCH(OH)Me$, b. 97°

(azeotrope containing 26% H2O, b. 85-6°); Me2C(OH)CH:CH2, b. 99°; CH2:CHCMe(OH)Et, b. 118°; and 1-vinyl-1-cyclohexanol, b2077°, m. 4°. These compds. can also be prepared with Fe powder (prepared from Fe carbonyl) as catalyst at 50°, 100 atmospheric H, reduction being stopped when the calculated amount of H has reacted. XXIII (200 g.), hydrogenated at room temperature and 50 atmospheric over 5 g. Raney Ni until half the calculated amount of H has reacted, then at 80° and 200 atmospheric to complete reaction gives 185 g. Me2C(OH)Et, b. 102°. PrOH, sec-BuOH, MeEt2COH, b. 124°, and 1-ethyl-1-cyclohexanol, b40 93°, are prepared similarly. Catalyst for preparing aldehydes and ketones from acetylenic alcs. is prepared from 500 g. kieselguhr containing 3% Fe, and 0.6% S (as SO4--), made into a paste with 5 g. PdCl2.2H2O in 200 ml. H2O, dried, powdered, pelleted, and reduced with H at 200°. XX (35 g.) and 15 g. H2O are vaporized over 100 ml. of this catalyst at 105° and 40 l. H for 1 hr. Distillation of 500 g. of condensate gives 300 g. EtCHO. MeCOEt is prepared similarly from XIb. Crude IX from 30% VIII, 1.5 kg., hydrogenated over 50 g. Raney Ni (or other common hydrogenation catalysts) at 40-60° and 200 atmospheric (with cooling to control reaction) gives 500 g. (CH2CH2OH)2, m. 20.1°, b. 229, b0.7 106°, d20 1.069, nD20 1.4461, bis-urethan, m. 198-200°. HOCH2CH2CH2CH(OH)Me, b15 125-8°, [MeCH(OH)CH2]2, b18 132-3°, b0.4 95-1000 (diacetate, b15 114°), [Me2C(OH)CH2]2, b15 117-18°, m. 91° (from EtOAc), and 1,1'-ethylenedicyclohexanol, b2 145°, m. 128-30°, are also prepared in similar yields. (CH2CH2OH)2 (180 g.) heated 4 hrs. with 5 g. FeCl3 and 60 g. (CH2O)n (or 30-40% VIII) gives 184 g. acetal, b. 117°. IX (500 g. 33%), and 50 g. Fe (prepared from Fe carbonyl), treated at 50° with 100 atmospheric H and reaction stopped when the calculated amount of H has reacted give 150 g. (HOCH2CH:)2 (XXV), b. 237-9°, b3 116-21°, m. 4°; diacetate, b13 108-10°; "formaldehyde acetal," b. 126°. Other suitable catalysts are Co, poisoned by adding 0.1% KSCN to the solution, and 0.2% Pt-C treated with 0.15% Na2HPO4, 0.1% H3BO4, or 1.5% C5H5N. Partial hydrogenation is also obtained with H containing 3-5% CO. [MeCH(OH)CH:]2, b6 109-11°, [Me2C(OH)CH:]2, b20 120-2°, m. 77°, and 1,1'-vinylenedicyclohexanol, m. 154°, are prepared similarly in nearly quant. yield. XX hydrated by heating 1500 g. 30% aqueous solution with 50 g. HgSO4 and 5 g. concentrated H2SO4 to 70° until the carbonyl number is constant, the mixture neutralized, the H2O azeotroped off with CH2Cl2 or XIIa, and the residue distilled give 350 g. HOCH2Ac, b15 49-51°. The following compds. are similarly hydrated (amount of starting compound, and the product, and its yield and b.p. given): MeOCH2C.tplbond.CH, 105 g., MeOCH2Ac, 100 g., b. 114-16°; XIb, -, MeCH(OH)Ac, no yield, b. 138-40°; (MeOCH2C.tplbond.)2 (XXVa), -, MeOCH2COCH2CH2CH2OMe, -, b17 83-5°; IX, 172 g., HOCH2COCH2CH2OH (XXVI), 120 g., b0.6 108-10° [also prepared in 65% yield from 500 ml. 10% aqueous HOCH2COCH:CH2 (XXVII) and 6 g. concentrated H2SO4, 20-30 hrs. at 30°]; and [MeCH(OH)C.tplbond.]2, -, MeCH(OH)COCH2CH(OH)Me, -, b2 96-8°. XXIIIa (700 g.) refluxed 3 hrs. with 40% H2SO4 gives 280 g. 1-acetyl-1-cyclohexene, b10 73-5°. HgO (5 g.), 2 g. BF3-Et2O, and 2 g. MeOH warmed to 60-70°, mixed with 64 g. MeOH, and 56 g. XX added with stirring at 50-60° so that the mixture refluxes smoothly, cooled after a sample no longer gives a precipitate with ammoniacal XI give 55 g. 2,5-dimethyl-2,5-dimethoxy-1,4-dioxane, m. 126-8° (from MeOH); the 2,5-di-EtO analog, prepared analogously, m. 73-4°. Aqueous XX (25%) passed at 330° (80 ml./hr.) through a 1-m. long porcelain tube containing 450 ml. catalyst (20% Cu, 1-2% Cr2O3 on silica gel, activated with H at 200-50°) gives 63% CH2:CHCHO. H2C:CHAc, prepared in 50% yield from XIb at 280-300° over 6% H3PO4 and 50% NaH2PO4 on graphite, b130 33°. XXVI, b10 45°, is prepared in 20-g. yield (90% pure) from 5 g. HgO, 1.5 g. Cl3CCO2H, 5 g. BF3-Et2O, and 5 g. EtOAc heated to 50-60°, cooled, added to 100 g. IX in 400 g. EtOAc, warmed to 40°, evacuated until the mixture refluxes at 45°, and the

mixture neutralized with Na2CO3 and distilled when the temperature drops rapidly (about 1 hr.). This compound polymerizes in light to a gel and, finally, to a solid, transparent, odorless, high-mol.-weight product. XXVI (300 g.) added to 700 g. boiling Ac2O, and refluxed 1 hr., gives 260 g. AcOCH2COCH:CH2, b12 81°, polymerizes to a gummy mass in a few days; 256 g. heated to 60° with 0.5 g. p-PhCH2NHC6H4OH 2 days gives 240 g. 2-acetoxyacetyl-6-acetoxymethyl-2,3-dihydropyran, b1 171°, m. 49°. IX (430 g.) in 700 ml. MeOH, added to catalyst mixture prepared by warming 15 g. HgO, 15 g. BF3Et2O, and 30 ml. MeOH, the temperature held to 30° by cooling, warmed a short time with 500 ml. 1% H2SO4 after reaction heat has died away, neutralized with Na2CO3, filtered, and distilled gives MeOCH2CH2COCH2OH (XXVIII), b7 84-7°. Separating Hg from the solution, distilling the excess MeOH, and cooling the mixture gives 2,5-dimethoxy-2,5-bis(β-methoxyethyl)-1,4-dioxane, m. 82°; this hydrolyzes to XXVIII on warming with dilute H2SO4. EtOCH2CH2COCH2OH, b16 104-6°, and iso-PrCH2CH2COCH2OH, b5 94°, are prepared analogously. H2SO4 (35 g.) and 125 g. 50% HOCH2C.tplbond.CCHMeOH treated at 60° and 130 mm. with an addnl. 375 g. of the diol gives 60 g. CH2:CHCOCH2CH2OH (or MeCH:CHCOCH2OH), b18 75°.
[MeCH(OH)C.tplbond.]2 (200 g.) in 800 ml. H2O mixed with 10 g. HgSO4 in 60 g. 17% H2SO4 at 30-5° (with cooling) gives 140 g. MeCH:CHCOCHMeOH, b2 48°. Hydrogenation of the corresponding oxo alcs. or glycols over Raney Ni at 200 atmospheric and 25-120° gives the following compds. in good yield: [MeCH(OH)]2 (XXVIIIa), b. 179°; HOCH2CHEtOH, b. 191°, b10 96-7°, from XXVII [40% solution of XXVI (prepared from 500 g. 33% aqueous IX, 5 g. HgSO4, and 10 g. concentrated H2SO4 at 30°) adjusted to pH 5 with CaCO3 and the precipitate filtered off and hydrogenated at 150° and 100 atmospheric gives 120 g. XXVIIIa; diacetate, b20 85-90°]; HOCH2CH(OH)CH2CH2OH, b1 130-1° (cyclic formaldehyde acetal, C5H10O3, prepared with (CH2O)n and FeCl3, b. 198-9°, b0.1 67-8°). The following HOCH2CH(OH)CH2CH2OR are similarly prepared from the 2-oxo precursor (R given): Me, b12 116°; Et, b10 122°; iso-Pr, b10 126-7°; tert-Bu, b4 110-11°.
[MeCH(OH)C.tplbond.]2 (400 g.) and 600 ml. H2O stirred and treated at 70-80° during 40 min. with 40 g. HgSO4, neutralized after 25 min. with Na2CO3. made weakly acidic with dilute H2SO4, neutralized with CaCO3, filtered off, and hydrogenated at 100° and 200 atmospheric over 200 g. "nickel-chromium oxide" catalyst, give 150 g. Me[CH(OH)]2Pr, b0.7-0.8 102° (gives deep blue color with CuSO4-NaOH), and a little Me[CH(OH)]2CH2CHMeOH, b0.7 140-50°. HOCH2CHEtOH (50 g.) and 5 g. p-MeC6H4SO3H (or KHSO4) heated rapidly to 160° with removal of H2O give 4 g. PrCHO and 25 g. 2,5-diethyldioxane, b21 62°; 50 g. XXVIIIa and 6 g. of a mixture of equal parts of p-MeC6H4SO3H and KHSO4 give 65 g. 2,3,5,6-tetramethyl-1,4-dioxane, b. 138-9°; HOCH2CH(OH)CH2CH2OH gives 0% 2,5-bis(β-hydroxyethyl)dioxane, b20 90°. XIb (125 g., 60%) is added during 5 hrs. to 500 ml. of a distilling solution containing 3.8% FeSO4, 41.4% Fe2(SO4)3, 0.15% HgSO4, and 1.2% H2SO4 (the original volume maintained by adding H2O) and the distillate saturated with NaCl and redistd. gives 20 g. Ac2, b. 87-8°.
(MeCH(OH)C.tplbond.)2 (300 g.) refluxed with 143 g. 80% H3PO4, 1.5 g. HgSO4, and 1 l. H2O, gives 260 g. AcCOPr, b150 82-5°, dioxime, m. 173°, dioxime-nickel complex, orange-red, m. 158-60°, and as by-product, 2,5-dimethyl-3-oxotetrahydrofuran, b150 94-5° (semicarbazone, m. 168-71°). HOCH2CH(OH)Et passed at 180° over granular CuO is converted in 32% yield to a mixture containing about 45% EtCOCHO (XXIX) and HOCH2COEt. IX (200 g.), 40 g. HgCl2, and 400 g. (CH2OH)2 heated 4 hrs. at 185° give 160 g. XXIX diethylene glycol acetal (C8H14O4), b12 100-5°, which partly crystallized on standing; 100 g. of this and 500 ml. 1% H2SO4 stirred 9 hrs. at 90° give XXIX, which polymerizes rapidly (dioxime, m. 129°), and XXIX monoethylene glycol acetal, b12 90-5°. XXVI (104 g.) and 300 ml. 30% VIII added at 70-80° to 500 g. CuSO4 in 2 l. H2O and 2 kg. 20% NH3, held at 70-85° 1-2 hrs., and the Cu complex filtered off, suspended in H2O,

decomposed with H2S, and the aqueous solution distilled give (2-hydroxyethyl)imidazole, b1 170-5° (picrate, m. 144°); this with SOCl2 gives (β-chloroethyl)imidazole which with alc. NH3 gives **histamine** di-HCl, m. 236-8° (picrate, m. 144°). IX (60 g.) heated 13 hrs. with 150 g. MeOH and 3 g. ZnCO3, gives EtCH(OH)CO2Me, b30 68°; other esters of this acid prepared similarly are: Et, b. 167-9°; Bu, b. 200-2°; allyl, b20 85-8°; PhCH2, b33 170-5°; and cyclohexyl, b37 145-50°. HCl passed into 112 g. XX and 6 g. HgCl2 heated to 60°, the solution neutralized with alkali when the temperature falls to 70° after reaction ceases, and saturated with K2CO3 gives 140 g. CH2:CClCH2OH, b. 135-40°; also prepared (225 g.) from 500 g. 30% aqueous XX, provided HCl addition is rapid and temperature held to 80°. XX (60 g.), 100 g. NaHSO3, and 100 ml. H2O refluxed several hrs., cooled, filtered, and diluted with MeOH gives NaO3SCH2CH(SO3Na)CH2OH; analogously, XXIII gives NaO3SCH2CH(SO3Na)CMe2OH and 200 g. IX give 260 g. HOCH2(CHSO3Na)2CH2OH. Aqueous XX (38 ml. 27.16%), 85 ml. H2O, 9 g. XI, and 25 g. NH4Cl shaken with O at 0° give 9.6 g. (HOCH2C.tplbond.C)2, m. 111-12° (from Et2O-petr. ether) (also prepared in quant. yield by a continuous process), which hydrogenates in MeOH over Raney Ni at 60° and 200 atmospheric to give 1,6-hexanediol, m. 41.5°, b13 143°. Other RC.tplbond.CH oxidized similarly in quant. yield to (RC.tplbond.C)2 are (R and product consts.): MeCHOH, m. 69-90° (mixture of stereoisomers, m. 68° and 109°, resp.); CH2:CH, b3 40°; and HO2CCH2CH2, decompose above 220°. A mixture of 60 g. H2C:CHC.tplbond.CH and 70 g. XXIII gives HOCMe2C.tplbond.CC.tplbond.CCH:CH2, b3 75°. XX (9 ml. 97.5%) added to 35 g. Cu(OAc)2.H2O and 30 g. NH4Cl in 90 ml. H2O (boiled in N) precipitated greenish yellow C3H3OCu2Cl. The following esters of XX are prepared by conventional methods: acetate, b. 110-12°; carbonate (C7H6O3) (from COCl2), b20 97°; adipate (C12H14O4), b4 142-5°; benzoate, b9 102-7°; p-nitrobenzoate, m. 88-90° (from ligroine); benzenesulfonate (XXX), b2 140-2°; and p-toluenesulfonate (XXXI), b5 161-2°. Also prepared is HC.tplbond.CCH(OAc)Et, b. 139-40°. XIb esters prepared are: acetate, b. 124-6°; benzoate, m. 27-9° (from ligroine); and p-toluenesulfonate, m. 58-60° (from cyclohexane). Also prepared is (AcOCH2C.tplbond.)2, b3 106°. Me2SO4 (75 g.) added at 40° to 56 g. XX in 44 ml. H2O and 110 g. 50% NaOH so that the temperature stays below 60°, stirred 2 hrs. at 50-60°, and distilled gives 62 g. MeOCH2C.tplbond.CH, b. 65°. Ethylene oxide (45 g.) and 58 g. 96% XX added rapidly and simultaneously to 300 ml. 2% NaOH and neutralized after 1 hr. give 41 g. HOCH2(CH2OCH2)2C.tplbond.CH, b12 76-7°, b14.5 79-80°. CH2:CHCN (53 g.) added to 60 g. 94% XX (dried over K2CO3 just before use) and 0.5 g. powdered NaOH, the temperature allowed to rise to 100°, then held at 50° 1 hr. with cooling, neutralized with dilute H2SO4 and distilled gives 75 g. HC.tplbond.CCH2OCH2CH2CN, b13 101-2°. PhOH (200 g.), 500 g. XXX, 315 ml. 35% NaOH, and 1.5 l. H2O stirred 2 hrs., heated to 90-5°, poured onto ice, and extracted with Et2O give 200 g. HC.tplbond.CCH2OPh, b10 81-3°. Other HC.tplbond.CCH2OR prepared similarly using XXX or XXXI are (R and m.p. or b.p.): o-O2NC6H4, m. 78-9° (from MeOH); p-O2NC6H4, m. 118-20°; o-OCHC6H4, m. 72-4° (from ligroine); pyrocatechol, b13 121-4°; β-naphthyl, m. 64-6° (from MeOH). Crude XXX (670 g.), and 250 ml. 35% NaOH added in 4 portions to 250 g. o-HOC6H4NHAc in 1670 ml. H2O, the mixture heated 1 hr. to 90°, treated with 30 ml. NaOH, cooled, and extracted with Et2O, the extract washed with 15% HCl, then 5% NaOH, and evaporated, and the residue heated 1 hr. with 1 l. 1:1 HCl give 81 g. o-HC.tplbond.CCH2OC6H4NH2. Similarly, p-HOC6H4CO2Me gives p-HC.tplbond.CCH2OC6H4CO2H, m. 212-14° (from MeOH) 40 g. XXX gave 10 g. p-HC.tplbond.CCH2OC6H4NHAc, m. 109-11°; hydrolysis gives the amine, b4 118-20°, from which an azo dye is prepared by diazotization and coupling with 1-phenyl-3-methyl-5-pyrazolone. (XXVa) b14 58°, is prepared in 400 g. yield by adding 1350 g. Me2SO4 and 1075 g. 40% NaOH to

400 g. IX in 400 ml. H2O at 40° so that the temperature remains constant without heating, stirring 2 hrs. at 50-60°, separating layers, treating the lower layer with another 600 g. Me2SO4 and 475 g. 40% KOH, and distilling the organic layers. Similarly 72 g. XXIII gives 65 g. [Me2C(OMe)C.tplbond.]2 (XXXII), b19 86-8°. Heating 172 g. 50% IX and 400 g. 50% NaOH to 80°, adding 250 g. MeHSO4 during 1 hr., stirring 4 hrs., and extracting with Et2O, gives 26 g. HOCH2C.tplbond.CCH2OMe, b30 106°, and 24 g. XXVa. Freshly distilled PhNH2 (93 g.) and 196 g. XXX mixed in an ice bath (temperature rises to 120°), the solution cooled, 100 ml. Me2CO added, the crystals washed with Me2CO, the combined filtrate and washings steam distilled, the distillate extracted with Et2O, the extract dried and distilled, the base (b28 146-52°) (37 g.) diluted with 50 ml. C6H6, refluxed 1 hr. with 25 ml. Ac2O, and extracted with HCl, and the extract neutralized give 11 g. PhN(CH2C.tplbond.CH)2, b4 94-6°. PhNR1R2 prepared similarly, using XXXI or the benzene-sulfonate of XIb, are (R1 and R2 given): Me, CH2C.tplbond.CH, b4 80-3°, m. 35-6°; Me, CHMeC.tplbond.CH, b1 76-8°; CH2CH2OH, CH2C.tplbond.CH, b2 135-7°; and CH2CH2OH, CHMeC.tplbond.CH, b3 137-40°. IX (344 g.) treated during 10 min. with 1200 g. SOCl2, left overnight at 10-15°, warmed to 80°, SOCl2 removed at the H2O pump, and the residue distilled gives 370 g. (ClCH2C.tplbond.)2 (XXXIII), b16 65-6° (reagents in this preparation must be freshly distilled and the distillation residue must not be heated above 100° or an explosion may occur). (Me2CClC.tplbond.)2, prepared similarly, b11 60-70°. IX (344 g.), and 476 g. SOCl2 as above gives a lava-like mass which, crystallized from Ac2O or HCONMe2, gives the cyclic disulfite (C8H8O6S2) (XXXIV), colorless crystals, m. 196-7°, of IX; IX is recovered in 8.4-g. yield by heating 25 g. XXXIV 0.5 hr. with 100 ml. 30% NaOH. Adding 57 g. 40% aqueous NaOH at 75° to 12.3 g. XXXIII in 50 ml. EtOH gives 1.9 l. (HC.tplbond.C)2. XXXIII (123 g.) treated with 430 g. pyrrolidone 2 hrs. at 20° gives 170 g. 1,1'-(2-butynylene)dipyrrolidine, b2.5 116-16.5°; 1,4-dipiperidino derivative (70 g. from 62 g. XXXIII and 180 g. piperidine) b5 160-1°.

L10 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1956:58677 HCAPLUS
DOCUMENT NUMBER: 50:58677
ORIGINAL REFERENCE NO.: 50:11032i,11033a-c
TITLE: Theoretical aspects in the manufacture of monoglycerides
AUTHOR(S): Demarcq, M.
SOURCE: Rev. franc. corps gras (1956), 3, 336-51
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB Monoglyceride (I) yields obtainable by glycerolysis of triglycerides or partial esterification of fatty acids are compared, and the influence of catalysts, quantity of reagents, temperature, etc. are discussed. The results of Feuge and Baily (C.A. 40, 6273.1) with their theoretical considerations are said to be fortuitous, probably owing to too-small quantities of glycerol in their reaction masses. The yields reported by **Hilditch** and Rigg (C.A. 30, 1741.8) in the presence of phenols are exceedingly high. In 12 analogous tests only 23.2-61.5% of I could be obtained from 100-200 g. of glycerol for 100 g. of stearic acid at 110-225°, reaction times of 1.18-7 hrs., and varying quantities of SnCl2, H2SO4, NaOH, or camphosulfonic acid as catalysts. Two tests with dioxane as solvent produced, resp., 33.7 and 39.4% of I, far beneath the yields of Richardson and Eckey (U.S. 2,251,692-3, C.A. 35, 6977.5). The best but uneconomical yields were with pyridine as the solvent, but tertiary BuOH as solvent gave in 12 tests with peanut oil, linseed oil, hydrogenated tallow, and others, with different Na alcoholates as catalysts, only slightly inferior yields; practically equal yields could be produced by employing **diacetone-alc.** solvent which, however, had poor stability. 71 references.

IT **123-42-2**, 2-Pentanone, 4-hydroxy-4-methyl-

(oil re esterification with glycerol in)

L10 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1949:22544 HCAPLUS
DOCUMENT NUMBER: 43:22544
ORIGINAL REFERENCE NO.: 43:4234d-i
TITLE: Condensations of **biacetyl** with primary aromatic amines in the presence of concentrated phosphoric acid. I
AUTHOR(S): Christen, F.; Prijs, B.; Lehr, H.
SOURCE: Helvetica Chimica Acta (1949), 32, 56-62
CODEN: HCACAV; ISSN: 0018-019X
DOCUMENT TYPE: Journal
LANGUAGE: German

AB cf. Erlenmeyer and Lehr, C.A. 40, 2797.7, 5090.2. Condensation of aromatic amines, RC6H4NH2 (I), with Ac2 (II), without solvent or in EtOH, yielded the expected dianils, while the same reaction in concentrated H3PO4, 60% H3AsO4, or 80% H2SO4 (poor yields) proceeds according to 2I + II = C20H18ON2R2 (III) + H2O. Concentrated H3PO4 with the dianil from I (R = p-Me) and II also yields III (R = p-Me). III crystallize from EtOH; they form mono-HCl salts and monoacyl derivs., contain 2 active H atoms, 2 double bonds (addition of Br or hydrogenation with Raney Ni), no carbonyl or primary NH2 group; they do not couple with diazotized 2-C10H7NH2. FeCl3 gives no color. A pinewood splinter is colored brown to red (bluish green by III, R = p-CO2H). Neither I nor II is obtained by treatment of III with acids or bases. Boiling III 3-5 min. with 65% H2SO4 yields brown solns.; dilution with H2O gives blue to green solns., changing to pink or violet with excess alkali; pH ranges for this color change are given. I (R = p-Me) (10.7 g.), kept 24 hrs. at 70° with 10 g. II, and 50 cc. concentrated H3PO4 give 6 g. III (R = p-Me), H2O-insol. yellow prisms, m. 147.5°, mol. weight (Rast) 325, is not changed by boiling aqueous or alc. NaOH. Mono-HCl salt, from III (R = p-Me) with HCl gas in C6H6, is decomposed by H2O or Na2CO3; its solution in EtOH is deep blue. Mono-Ac derivative, from III (R = p-Me) with AcCl in C6H6 and K2CO3, nearly colorless, m. 142.5-3°. Mono-3,5-dinitrobenzoate, yellow, m. 227°. III (R = p-Me) in Et2O, irradiated 5 hrs. with ultraviolet light, yields a compound C22H24O3N2, lemon-yellow, m. 143°. I (R = p-MeO) with II gives III (R = p-MeO), slightly greenish, m. 123.5°. III (R = p-EtO), similarly obtained from I (R = p-EtO), **cream**-colored, m. 123.5°; mono-3,5-dinitrobenzoate, lemon-yellow, m. 176.5°. III (R = p-Cl), yellow, m. 169°. III (R = p-CO2H), m. 288-9.5° (decomposition), mol. weight (electrometric) 392. III (R = p-Ac), lemon-yellow, m. 202-3°; III (R = p-CO2Et), colorless, m. 148°.

IT **431-03-8, 2,3-Butanedione**
(reaction with primary aromatic amines)

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E1 THROUGH E16 ASSIGNED

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DICTIONARY FILE UPDATES: 30 JUN 2004 HIGHEST RN 701907-96-2

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http://www.cas.org/ONLINE/DBSS/registryss.html

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FILE 'REGISTRY' ENTERED AT 11:55:20 ON 01 JUL 2004
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L12 3 S L11 AND L1

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L12 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2004 ACS on STN
RN **492-73-9** REGISTRY
CN Ethanedione, di-2-pyridinyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Glyoxal, di-2-pyridyl- (6CI, 7CI, 8CI)
OTHER NAMES:
CN α-Pyridil
CN 1,2-Bis(2-pyridinyl)-1,2-ethanedione
CN 1,2-Bis(2-pyridyl)-1,2-ethanedione
CN 2,2'-Dipyridylglyoxal
CN 2,2'-Pyridil
CN Bipicolinoyl
CN Bis(2-pyridyl)ethanedione
CN **Di-2-pyridyldiketone**
CN Di-2-pyridylglyoxal
CN NSC 16545
FS 3D CONCORD
MF C12 H8 N2 O2
CI COM
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
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Other Sources: EINECS**
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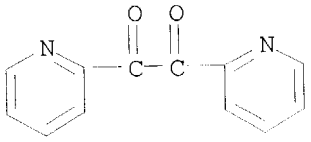
DT.CA CAplus document type: Dissertation; Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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184 REFERENCES IN FILE CAPLUS (1907 TO DATE)
21 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:431154

REFERENCE 2: 140:313585

REFERENCE 3: 140:294551

REFERENCE 4: 140:253541

REFERENCE 5: 140:235285

REFERENCE 6: 140:119650

REFERENCE 7: 140:93745

REFERENCE 8: 140:59599

REFERENCE 9: 139:261254

REFERENCE 10: 139:149797

L12 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2004 ACS on STN
RN **431-03-8** REGISTRY
CN 2,3-Butanedione (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2,3-Butadione
CN 2,3-Diketobutane
CN 2,3-Dioxobutane
CN Biacetyl
CN Butanedione
CN Diacetyl
CN **Dimethyl diketone**
CN Dimethylglyoxal
CN NSC 8750
FS 3D CONCORD
DR 151677-70-2
MF C4 H6 O2
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM*, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PIRA, PROMT, PS, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL, VTB
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Other Sources: DSL**, EINECS**, TSCA**
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DT.CA CAplus document type: Book; Conference; Dissertation; Journal; Patent; Preprint; Report

RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); CMBI (Combinatorial study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); CMBI (Combinatorial study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
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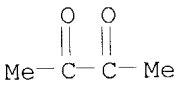

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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38 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
6987 REFERENCES IN FILE CAPLUS (1907 TO DATE)
14 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 141:6957

REFERENCE 2: 141:6074

REFERENCE 3: 141:5943

REFERENCE 4: 141:5941

REFERENCE 5: 141:5939

REFERENCE 6: 141:3723

REFERENCE 7: 140:429756

REFERENCE 8: 140:423657

REFERENCE 9: 140:422599

REFERENCE 10: 140:422584

L12 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2004 ACS on STN
RN **123-42-2** REGISTRY
CN 2-Pentanone, 4-hydroxy-4-methyl- (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2-Hydroxy-2-methyl-4-pentanone
CN 2-Methyl-2-pentanol-4-one
CN 2-Methyl-4-oxo-2-pentanol
CN 4-Hydroxy-2-keto-4-methylpentane
CN 4-Hydroxy-4-methyl-2-oxopentane
CN 4-Hydroxy-4-methyl-2-pentanone
CN 4-Methyl-4-hydroxy-2-pentanone
CN Acetonyldimethylcarbinol

CN Diacetone alcohol
CN **Diketone alcohol**
CN NSC 9005
CN Pyranton A
CN Tyranton
FS 3D CONCORD
MF C6 H12 O2
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM*, DIPPR*, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, ULIDAT, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
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DT.CA CAplus document type: Book; Conference; Journal; Patent; Report
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
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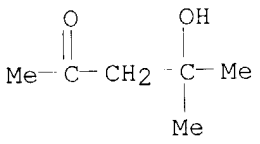

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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28 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2206 REFERENCES IN FILE CAPLUS (1907 TO DATE)
8 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:392447

REFERENCE 2: 140:392446

REFERENCE 3: 140:378033

REFERENCE 4: 140:377621

REFERENCE 5: 140:339681

REFERENCE 6: 140:327765

REFERENCE 7: 140:322996

REFERENCE 8: 140:322475

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REFERENCE    9:  140:320283

REFERENCE   10:  140:300134


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=> d stat que l34
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L2         21774 SEA FILE=REGISTRY ABB=ON  PLU=ON  SULFUR/BI
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L4         37613 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L3
L5         54254 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L4 OR ?DIKETONE?
L6        589911 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L2 OR ?SULFUR?
L7          1818 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6 AND L5
L9            28 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L7 AND (?ANESTHE? OR ?HISTAMIN
                 E? OR ?CORTICOST? OR ?IRRITANT? OR ?CREAM? OR ?LOTION? OR
                 ?OINTMENT? OR URGENT? OR ?ITCH?)
L10           18 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L9 NOT (FLAVOR? OR CREAM(W)BUT
                 TER OR FOOD#)
L13               STR

O=C-C=O
1  2  3  4


NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  4

STEREO ATTRIBUTES: NONE
L15               SCR 1838
L17        12842 SEA FILE=REGISTRY SSS FUL L13 NOT L15
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L18      117304 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L17
L20        1606 SEA FILE=REGISTRY ABB=ON  PLU=ON  COLLOID? OR SUSPENSION? OR
               DISPERS?
L21     1941897 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L20 OR COLLOID? OR SUSPENSION?
                OR DISPERS?
L22      140971 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L21(L)L6
L29        6235 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6 AND L18
L30         654 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L29 AND L22
L31      482726 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (?ANESTHE? OR ?HISTAMINE? OR
               ?CORTICOST? OR ?IRRITANT? OR ?CREAM? OR ?LOTION? OR ?OINTMENT?
               OR URGENT? OR ?ITCH?)
L32           20 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L31 AND L30
L33           19 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L32 NOT L10
L34           17 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L33 NOT (CREAM(W)BUTTER OR
               FLAVOR? OR FOOD#)


=>
=>

=> d ibib abs hitrn l34 1-17

L34  ANSWER 1 OF 17  HCAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         2004:433119  HCAPLUS
DOCUMENT NUMBER:          141:14233
TITLE:                    Polyimide optical materials, their precursor
                          solutions, and optical waveguide devices with low
                          transmission loss
INVENTOR(S):              Kawamonzen, Yoshihiro; Nakayama, Toshio
PATENT ASSIGNEE(S):       Toshiba Corp., Japan
SOURCE:                   Jpn. Kokai Tokkyo Koho, 51 pp.
                          CODEN: JKXXAF
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE          APPLICATION NO.  DATE
     ---------------   ----  --------      ---------------  --------
     JP 2004149711      A2   20040527      JP 2002-318239   20021031
PRIORITY APPLN. INFO.:                   JP 2002-318239   20021031
AB   The optical materials, showing good heat and solvent resistance, comprise
     heterocyclic ring-containing polyimides preferably containing 5-40% F.  The
     optical waveguide devices including the optical materials in core and/or
     cladding layers are useful for optical couplers, optical modulators,
     optical integrated circuits, etc.
IT   996-98-5 7704-34-9, Sulfur, reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (heterocyclic ring-containing polyimide optical materials for optical
        waveguide devices with low transmission loss)

L34  ANSWER 2 OF 17  HCAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         2004:39379  HCAPLUS
DOCUMENT NUMBER:          140:98075
TITLE:                    Manufacturing of silicon carbide fibers essentially
                          devoid of whiskers
INVENTOR(S):              Angier, Derek John; Rhodes, James F.; Rogers, William
                          M.
PATENT ASSIGNEE(S):       Advanced Composite Materials Corporation, USA
SOURCE:                   Brit. UK Pat. Appl., 42 pp.
                          CODEN: BAXXDU
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
```

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2390603	A1	20040114	GB 2003-16085	20030709
US 2004009112	A1	20040115	US 2002-191973	20020710
DE 10330818	A1	20040408	DE 2003-10330818	20030708
JP 2004036073	A2	20040205	JP 2003-272940	20030710

PRIORITY APPLN. INFO.: US 2002-191973 A 20020710

AB Silicon carbide fibers are produced by mixing discontinuous isotropic carbon fibers with a silica source and heating the mixture in an inert atmospheric at 1450-1800°. The silicon carbide fibers are essentially devoid of whiskers have excellent resistance to heating and excellent response to microwave energy, and can readily be formed into a ceramic medium employing conventional ceramic technol. The fibers also may be used for plastic and metal reinforcement. The mixture of carbon fibers and silica source may also contain two promoters (a) a compound or complex of Fe, Co or Ni and (b) a compound or complex of alkali metal or alkaline earth metal. Preferred promoters are ferrous sulfate and calcium oxalate.

IT **7704-34-9**, **Sulfur**, occurrence
RL: OCU (Occurrence, unclassified); OCCU (Occurrence)
(making silicon carbide fibers essentially devoid of whiskers)

IT **563-72-4**
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)
(promoter; making silicon carbide fibers essentially devoid of whiskers)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 3 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:472412 HCAPLUS
DOCUMENT NUMBER: 139:26677
TITLE: Method for reducing acne or improving skin tone
INVENTOR(S): Wiegand, Benjamin; McCulloch, Laura; Grossman, Rachel; Halas, Lynn
PATENT ASSIGNEE(S): Johnson & Johnson Consumer Companies, Inc., USA
SOURCE: PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003049769	A2	20030619	WO 2002-US38747	20021204
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2002146469	A1	20021010	US 2001-12627	20011207
US 2002151527	A1	20021017	US 2001-17180	20011207

PRIORITY APPLN. INFO.: US 2001-12627 A 20011207
US 2001-17180 A 20011207

US 2000-256813P P 20001220

AB The present invention relates to a method for reducing the number and severity of acne lesions on the skin of a mammal. The method comprises the step of administering a sensory regimen in an amount effective to down-regulate the activity of the hypothalamus-pituitary-adrenal axis of the mammal in combination with the administration of an anti-acne composition comprising an effective amount of an anti-acne agent. Thus, a **cream** contained Laureth-4 0.4, HPMC 0.2, Carbomer-934P 1.75, disodium EDTA 0.2, NaOH 0.29, benzoyl peroxide (75%) 6.67, and water qs to 100%. The above formulation was tested in humans. The addition of fragrance to the benzoyl peroxide skin **cream** composition was perceived by the participants to significantly improve the performance of the product.

IT **127-17-3**, Pyruvic acid, biological studies **7704-34-9**, **Sulfur**, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compns. for reducing acne or improving skin tone)

L34 ANSWER 4 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:637534 HCAPLUS
DOCUMENT NUMBER: 137:190733
TITLE: Hydrogen peroxide-containing compositions for removal of acrochordon
INVENTOR(S): Miller, Mickey; Ancira, Margaret
PATENT ASSIGNEE(S): Physician's Choice of Arizona, Inc., USA
SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002064151	A1	20020822	WO 2002-US3530	20020208
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003008018	A1	20030109	US 2002-72829	20020208
EP 1365781	A1	20031203	EP 2002-720927	20020208
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004518715	T2	20040624	JP 2002-563944	20020208

PRIORITY APPLN. INFO.: US 2001-267978P P 20010209
WO 2002-US3530 W 20020208

AB The subject of the present invention is acrochordon removal and prevention utilizing safe dependable effective biocompatible treatments with no scarring, bleeding, twisting, yanking, choking, burning, freezing, shocking, **screaming** and hypo pigmentation or hyper pigmentation. Methods for acrochordon removal comprise application of high concns. of hydrogen peroxide (at least 23%). The composition further comprises a vitamin, an amino acid, a melanin inhibitor, an organic acid, a hormone, a sulfoxide, an alc., a fatty acid, a polyol, an amide, a surfactant, a terpene, etc. For example, the composition comprises 35% hydrogen peroxide, 0.5% L-ascorbic acid, 0.5% niacin, 0.5% glycine, 0.5% hydroquinone, 0.5% superoxide dismutase, 5% galacturonic acid, and 14% ethanol.

IT **127-17-3**, Pyruvic acid, biological studies **433-48-7**,

β-Fluoropyruvic acid **5699-58-1**, Acetylpyruvic acid
7704-34-9, Sulfur, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hydrogen peroxide-containing compns. for removal of acrochordon)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 5 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:844153 HCAPLUS
DOCUMENT NUMBER: 133:366187
TITLE: Skin product comprising a retinyl ester and an alkaline earth metal salt
PATENT ASSIGNEE(S): Oreal S. A., Fr.
SOURCE: Fr. Demande, 14 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2790667	A1	20000915	FR 1999-3047	19990310
FR 2790667	B1	20020614		

PRIORITY APPLN. INFO.: FR 1999-3047 19990310
AB Skin products comprising a retinyl ester and an alkaline earth metal salt, with no lipase, are disclosed. The alkaline earth metal salt activate the endogenous lipase which then hydrolyzes the retinyl ester or retinol. A **cream** contained polyglyceryl-2-sesquiisostearate 3, bees wax 4, mineral oil 30, magnesium stearate 0.2, aluminum stearate 0.1, retinyl propionate 0.5, calcium chloride 0.3, perfume 0.5, preservative 0.4, and water q.s. 100%. The **cream** decreases the skin wrinkles and pigmentations in a few weeks.
IT **338-70-5D**, salts, biological studies **7704-34-9, Sulfur**, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(skin product comprising retinyl ester and alkaline earth metal salt)

L34 ANSWER 6 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1997:456076 HCAPLUS
DOCUMENT NUMBER: 127:166009
TITLE: Reduction of acid rain and ozone depletion precursors
INVENTOR(S): Oehr, Klaus Heinrich; Simons, Girard A.; Zhou, Jiahua
PATENT ASSIGNEE(S): Dynamotive Corp., Can.
SOURCE: U.S., 6 pp., Cont.-in-part of U.S. 5,458,083.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5645805	A	19970708	US 1995-491751	19950619
US 5645805	B1	20000111		
US 5458803	A	19951017	US 1993-130123	19930930
US 5458803	B1	19990803		

PRIORITY APPLN. INFO.: US 1993-130123 A2 19930930
AB A method for reducing acid emissions and ozone deletion precursors from a flue gas produced by the combustion of **sulfur**-or nitrogen-containing fuel or acid emissions and ozone deletion precursors from chemical plants is described. The method comprises introducing into a flue containing the gas,

an additive derived from the chemical reaction of pyrolysis liquor with an alkaline earth metal compound in the presence of an oxidant. This reaction produces a hydrophobic/hydrophilic mixture containing a plurality of thermolabile alkaline earth metal compds. These compds. are able to decompose at flue gas temperature to produce an alkaline compound able to react with **sulfur** dioxide and oxides of nitrogen to eliminate them from the gas.

IT **7783-06-4P**, Hydrogen sulfide, processes
RL: BYP (Byproduct); PEP (Physical, engineering or chemical process); REM (Removal or disposal); PREP (Preparation); PROC (Process)
(reduction of acid rain and ozone depletion precursors)

IT **127-17-3**, Pyruvic acid, formation (nonpreparative)
7704-34-9, Sulfur, formation (nonpreparative)
RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative)
(reduction of acid rain and ozone depletion precursors)

IT **78-98-8**, Methyl glyoxal
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(reduction of acid rain and ozone depletion precursors)

IT **7446-09-5, Sulfur** dioxide, occurrence
RL: POL (Pollutant); OCCU (Occurrence)
(reduction of acid rain and ozone depletion precursors)

L34 ANSWER 7 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1996:401524 HCAPLUS
DOCUMENT NUMBER: 125:137546
TITLE: Geovibrio ferrireducens, a phylogenetically distinct dissimilatory Fe(III)-reducing bacterium
AUTHOR(S): Caccavo, Frank; Coates, John D.; Rossello-Mora, Ramon A.; Ludwig, Wolfgang; Schleifer, Karl Heinz; Lovley, Derek R.; McInerny, Michael J.
CORPORATE SOURCE: Center Biofilm Engineering, Montana State University, Bozeman, MT, 59717, USA
SOURCE: Archives of Microbiology (1996), 165(6), 370-376
CODEN: AMICCW; ISSN: 0302-8933
PUBLISHER: Springer
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A new, phylogenetically distinct, dissimilatory Fe(III)-reducing bacterium was isolated from surface sediment of a hydrocarbon contaminated **ditch**. The isolate, designated strain PAL-1, was an obligately anaerobic, non-fermentative, motile, gram-neg. vibrio. PAL-1 grew in a defined medium with acetate as electron donor and ferric pyrophosphate, ferric oxyhydroxide, ferric citrate, Co(III)-EDTA, or elemental S as sole electron acceptor. PAL-1 also used Pro, H, lactate, propionate, succinate, fumarate, pyruvate, or yeast extract as electron donors for Fe(III) reduction PAL-1 did not reduce O, Mn(IV), U(VI), Cr(VI), nitrate, sulfate, sulfite, or thiosulfate with acetate as the electron donor. Cell suspensions of PAL-1 exhibited dithionite-reduced minus air-oxidized difference spectra that were characteristic of c-type cytochromes. Anal. of the 16S rRNA gene sequence of PAL-1 showed that the strain is not related to any of the described metal-reducing bacteria in the Proteobacteria and, together with Flexistipes sinusarabici, forms a sep. line of descent within the Bacteria. Phenotypically and phylogenetically, strain PAL-1 differs from all other described bacteria and represents the type strain of a new genus and species, Geovibrio ferrireducens.

IT **127-17-3**, biological studies **7704-34-9, Sulfur**
, biological studies
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(dissimilatory Fe(III)-reducing bacterium Geovibrio ferrireducens)

L34 ANSWER 8 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1994:116847 HCAPLUS

DOCUMENT NUMBER: 120:116847
TITLE: Biodegradable controlled release melt-spun delivery system
INVENTOR(S): Fuisz, Richard C.
PATENT ASSIGNEE(S): Fuisz Technologies, Ltd., USA
SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9324154	A1	19931209	WO 1993-US5307	19930602
W: AU, CA, HU, JP, KR, PL, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5518730	A	19960521	US 1992-893238	19920603
AU 9344058	A1	19931230	AU 1993-44058	19930602
AU 665844	B2	19960118		
JP 07507548	T2	19950824	JP 1994-500877	19930602
EP 746342	A1	19961211	EP 1993-914373	19930602
EP 746342	B1	20020814		
R: BE, CH, DE, DK, FR, GB, IE, IT, LI, LU, NL, SE				

PRIORITY APPLN. INFO.: US 1992-893238 A2 19920603
WO 1993-US5307 A 19930602

AB Biodegradable controlled-release delivery systems using melt-spun biodegradable polymers as carriers for bio-effecting agents such as pharmaceutical actives are disclosed. Oral dose forms as well as implants are described. For example, polyglycolide was melt-spun in combination with various drugs such as vancomycin, gentamicin, tolmetin, diphenhydramine, ibuprofen, and insulin and controlled drug release was demonstrated.

IT **144-62-7D**, Oxalic acid, polymers
RL: BIOL (Biological study)
(controlled-release pharmaceuticals formed by flash-flow melt-spinning containing, as carrier)

IT **7704-34-9**, **Sulfur**, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(controlled-release pharmaceuticals formed by flash-flow melt-spinning containing, biodegradable polymers as carriers in)

L34 ANSWER 9 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:634827 HCAPLUS
DOCUMENT NUMBER: 119:234827
TITLE: Electrokinetic and magnetic properties of submicron barium ferrite (BaFe12O19) powder dispersions
AUTHOR(S): Kaczmarek, W. A.; Radlinska, E. Z.; Ninham, B. W.
CORPORATE SOURCE: Res. Sch. Phys. Sci. Eng., Aust. Natl. Univ., Canberra, 2601, Australia
SOURCE: Materials Chemistry and Physics (1993), 35(1), 31-5
CODEN: MCHPDR; ISSN: 0254-0584
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The morphol., electrokinetic, and magnetic properties of submicron Ba ferrite powder (suspended freely in water solns. of simple sodium salts) are studied. Ferrite particles in water solns. behave as colloidal particles, with the surface potential proportional to pH, and the point of zero charge at pH 5. A method for determining the magnetic **switching** field Hs of powder assemblies is described. The Hs depends on pH when the particles are immersed in 0.5 M Na salt solns., with the maximum observed value for NaNO3 at pH 7.8.

IT **113-24-6**

RL: PRP (Properties)
(electrokinetic and magnetic properties of submicron **dispersions** of barium ferrite in aqueous)

L34 ANSWER 10 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:503334 HCAPLUS
DOCUMENT NUMBER: 119:103334
TITLE: Enhanced skin penetration system for improved topical delivery of drugs
INVENTOR(S): Deckner, George Endel; Lombardo, Brian Scott
PATENT ASSIGNEE(S): Richardson-Vicks, Inc., USA
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9307902	A1	19930429	WO 1992-US8741	19921013
W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MG, MN, MW, NO, PL, RO, RU, SD				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
AU 9228064	A1	19930521	AU 1992-28064	19921013
AU 675211	B2	19970130		
EP 608320	A1	19940803	EP 1992-921755	19921013
EP 608320	B1	19980128		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, SE				
HU 74560	A2	19970128	HU 1994-1107	19921013
AT 162725	E	19980215	AT 1992-921755	19921013
ES 2114569	T3	19980601	ES 1992-921755	19921013
CN 1072863	A	19930609	CN 1992-112390	19921016
IN 178157	A	19970308	IN 1992-DE1011	19921105
IN 181010	A	19980411	IN 1992-DE1013	19921105
NO 9401319	A	19940616	NO 1994-1319	19940413
FI 9401771	A	19940415	FI 1994-1771	19940415
US 5756118	A	19980526	US 1995-462258	19950605
US 5756119	A	19980526	US 1995-462376	19950605
US 5773023	A	19980630	US 1995-462710	19950605
US 5780049	A	19980714	US 1995-464991	19950605
US 5776485	A	19980707	US 1995-469701	19950606
US 5874095	A	19990223	US 1998-49367	19980327

PRIORITY APPLN. INFO.:

US 1991-778424	A	19911016
US 1992-957752	B1	19921002
WO 1992-US8741	A	19921013
US 1993-111032	B1	19930824
US 1994-228167	B1	19940415
US 1995-390902	B3	19950216
US 1995-462710	B3	19950605

AB A topical composition with enhanced penetration through skin comprises an active agent and a nonionic polyacrylamide having a mol. weight of 1χ106-3χ107. An analgesic composition contained Alc. SDA-40 40.0, ibuprofen 2.0, polyacrylamide/C13-14 isoparaffin/Laureth-7 3.0, and purified water 55.0%.

IT **127-17-3**, Pyruvic acid, biological studies **7704-34-9**, **Sulfur**, biological studies
RL: BIOL (Biological study)
(anti-acne topical compns. containing polyacrylamide and)

L34 ANSWER 11 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:503333 HCAPLUS

DOCUMENT NUMBER: 119:103333
TITLE: Enhanced skin penetration system for improved topical delivery of drugs
INVENTOR(S): Deckner, George Endel; Lombardo, Brian Scott
PATENT ASSIGNEE(S): Richardson-Vicks, Inc., USA
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9307903	A1	19930429	WO 1992-US8744	19921013
W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MG, MN, MW, NO, PL, RO, RU, SD				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
AU 9228639	A1	19930521	AU 1992-28639	19921013
AU 675212	B2	19970130		
EP 608322	A1	19940803	EP 1992-921769	19921013
EP 608322	B1	19980722		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, SE				
JP 07500594	T2	19950119	JP 1993-507771	19921013
JP 3471354	B2	20031202		
HU 67046	A2	19950130	HU 1994-1106	19921013
BR 9206631	A	19951024	BR 1992-6631	19921013
AT 168563	E	19980815	AT 1992-921769	19921013
ES 2118834	T3	19981001	ES 1992-921769	19921013
CN 1072602	A	19930602	CN 1992-113328	19921016
CN 1050763	B	20000329		
US 6277892	B1	20010821	US 1994-191734	19940204
NO 9401317	A	19940616	NO 1994-1317	19940413
FI 9401770	A	19940415	FI 1994-1770	19940415
HK 1013002	A1	20000623	HK 1998-114300	19981221

PRIORITY APPLN. INFO.:
US 1991-778422 A 19911016
US 1992-948391 A 19920925
WO 1992-US8744 A 19921013
US 1993-59001 B1 19930506

AB A topical composition with enhanced penetration through skin comprises an active agent and a high-mol.-weight crosslinked cationic polymer, such as dialkylaminoalkyl (meth)acrylate polymers. An anti-acne composition contained Alc. SDA-40 40.0, Polyquaternium-32 and mineral oil 4.0, salicylic acid 2.0, and purified water 54.0%.

IT **127-17-3**, Pyruvic acid, biological studies **7704-34-9**, **Sulfur**, biological studies
RL: BIOL (Biological study)
(anti-acne topical compns. containing dialkylaminoalkyl acrylate polymers and)

L34 ANSWER 12 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:434327 HCAPLUS
DOCUMENT NUMBER: 119:34327
TITLE: Low-pH aqueous gels containing nonionic polyacrylamide derivatives
INVENTOR(S): Deckner, George Endel; Lombardo, Brian Scott
PATENT ASSIGNEE(S): Richardson-Vicks, Inc., USA
SOURCE: PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9307856	A1	19930429	WO 1992-US8743	19921013
W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MG, MN, MW, NO, PL, RO, RU, SD				
RW: AT, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG				
AU 9228000	A1	19930521	AU 1992-28000	19921013
AU 675210	B2	19970130		
EP 608353	A1	19940803	EP 1992-922437	19921013
EP 608353	B1	19960131		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, SE				
JP 07500593	T2	19950119	JP 1992-507770	19921013
HU 66957	A2	19950130	HU 1994-1105	19921013
BR 9206630	A	19950425	BR 1992-6630	19921013
AT 133560	E	19960215	AT 1992-922437	19921013
ES 2083197	T3	19960401	ES 1992-922437	19921013
CA 2119636	C	19980623	CA 1992-2119636	19921013
CN 1072843	A	19930609	CN 1992-113394	19921016
CN 1050283	B	20000315		
NO 9401318	A	19940615	NO 1994-1318	19940413
FI 9401769	A	19940415	FI 1994-1769	19940415
US 5707635	A	19980113	US 1994-249093	19940525

PRIORITY APPLN. INFO.:
US 1991-778423 A 19911016
US 1992-931553 B1 19920818
WO 1992-US8743 A 19921013
US 1993-121661 B1 19930915

AB An aqueous gel comprising 0.05-20% of acrylamide derivative polymers (mol. weight 1+106 - 3+107) provides an improved skin-feel, excellent moisturizing, and absorption characteristics. An anti-acne composition contained Alc. SD-40 40.0, Sepigel (made of polyacrylamide, C13-14-isoparaffin, and laureth-7) 4.0, salicylic acid 2.0, and purified water 54%.

IT **127-17-3**, Pyruvic acid, biological studies **7704-34-9**, **Sulfur**, biological studies
RL: BIOL (Biological study)
(anti-acne aqueous gels containing polyacrylamide and)

L34 ANSWER 13 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1989:10914 HCAPLUS
DOCUMENT NUMBER: 110:10914
TITLE: Partial oxidation of **sulfur**-containing solid carbonaceous fuel
INVENTOR(S): Najjar, Mitru S.; Corbeels, Roger J.
PATENT ASSIGNEE(S): Texaco Inc., USA
SOURCE: U.S., 5 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4774021	A	19880927	US 1987-32157	19870327
US 4876031	A	19891024	US 1988-161581	19880229
US 4952380	A	19900828	US 1988-179931	19880411
US 4889699	A	19891226	US 1988-208933	19880620
US 4851152	A	19890725	US 1988-242588	19880912
US 4857229	A	19890815	US 1988-258947	19881017
US 4925644	A	19900515	US 1988-276735	19881128

PRIORITY APPLN. INFO.:

US 1987-32157	19870327
US 1987-51982	19870519
US 1987-62018	19870615
US 1987-100673	19870924

AB A process is described for simultaneous partial oxidation-**desulfurization** of S- and silicate-containing solid carbonaceous fuel (e.g., coal and petroleum coke) for the production of (H2 + CO) gas mixts. containing <0.05 volume% of (H2S + COS). In the process, an aqueous slurry of the solid carbonaceous fuel and a Cu-containing compound are reacted by partial oxidation in a vertical refractory-lined, unobstructed, down-flowing gas generator with a controlled amount of free-O containing gas and, optionally a temperature moderator so that the equilibrium O partial pressure is <10-6 atmospheric The O-C atomic ratio is 0.5-2.0:1; the H2O-solid fuel weight ratio is 0.2-0.7:1. The total mols of Cu in the reaction zone is at least equal to .apprx.1.0 times the mols of S in the solid fuel. The partial oxidation and **desulfurization** reactions take place simultaneously at a temperature which produces fly-ash or molten slag at an increased thermal efficiency. At least .apprx.90 weight% of the S in the solid fuel in the reaction zone is converted into Cu oxysulfide particulate matter which leaves the reaction zone along with the fly-ash or molten slag entrained in the hot raw effluent gas stream. The H2O-H2 mol ratio in the reaction zone is 0.4-3.0:1. The hot raw effluent gas is cooled and cleaned without contact with water.

IT **7439-96-5**, Manganese, uses and miscellaneous
RL: USES (Uses)
(additives containing copper and, in simultaneous partial oxidation-**desulfurization** of solid carbonaceous fuels, for manufacture of synthesis gas)

IT **144-62-7D**, Oxalic acid, copper salts
RL: USES (Uses)
(additives, in simultaneous partial oxidation-**desulfurization** of solid carbonaceous fuels, for synthesis gas manufacture)

IT **7783-06-4**, Hydrogen sulfide, uses and miscellaneous
RL: REM (Removal or disposal); PROC (Process)
(removal of, in simultaneous partial oxidation-**desulfurization** of solid carbonaceous fuels, for manufacture of synthesis gas)

L34 ANSWER 14 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:	1988:616035 HCAPLUS
DOCUMENT NUMBER:	109:216035
TITLE:	Hydroxycarboxylic acids as additives enhancing topical actions of therapeutic agents
INVENTOR(S):	Van Scott, Eugene J.
PATENT ASSIGNEE(S):	Yu, Ruey J., USA
SOURCE:	Eur. Pat. Appl., 23 pp. CODEN: EPXXDW
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	7

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 273202	A2	19880706	EP 1987-117405	19871125
EP 273202	A3	19900606		
EP 273202	B1	19950621		
R: DE, ES, FR, GB, IT				
AU 8779986	A1	19880623	AU 1987-79986	19871021
AU 618517	B2	19920102		
CA 1324077	A1	19931109	CA 1987-549964	19871022
JP 63166837	A2	19880711	JP 1987-280275	19871105
JP 2533339	B2	19960911		

EP 599819	A2	19940601	EP 1994-102151	19871125
EP 599819	A3	19940727		
EP 599819	B1	19970402		
R: DE, ES, FR, GB, IT				
ES 2074978	T3	19951001	ES 1987-117405	19871125
EP 770399	A2	19970502	EP 1997-100470	19871125
R: DE, ES, FR, GB, IT				
ES 2103506	T3	19970916	ES 1994-102151	19871125
JP 3016588	B2	20000306	JP 1991-505539	19910121
AU 9213943	A1	19920528	AU 1992-13943	19920331
AU 654850	B2	19941124		
US 5385938	A	19950131	US 1992-925877	19920807
US 5385938	B1	19920807		
CA 1340120	A1	19981110	CA 1992-616460	19920810
US 5091171	B1	19950926	US 1992-90002911	19921217
US 5665776	A	19970909	US 1993-8223	19930122
US 5389677	A	19950214	US 1993-89101	19930712
US 5389677	B1	19970715		
US 5702688	A	19971230	US 1993-135841	19931007
US 5422370	A	19950606	US 1994-179189	19940110
US 5422370	B1	19970715		
US 5470880	A	19951128	US 1994-179190	19940110
US 5550154	A	19960827	US 1995-463235	19950605
US 5561159	A	19961001	US 1995-463062	19950605
US 5561155	A	19961001	US 1995-464071	19950605
US 5589505	A	19961231	US 1995-463724	19950605
US 5591774	A	19970107	US 1995-463063	19950605
US 5668177	A	19970916	US 1995-464500	19950605
US 5670541	A	19970923	US 1995-464475	19950605
US 5550158	A	19960827	US 1995-471530	19950606
US 5554651	A	19960910	US 1995-467894	19950606
US 5556882	A	19960917	US 1995-467530	19950606
US 5561156	A	19961001	US 1995-470433	19950606
US 5561153	A	19961001	US 1995-470435	19950606
US 5565487	A	19961015	US 1995-471528	19950606
US 5571841	A	19961105	US 1995-470434	19950606
US 5574067	A	19961112	US 1995-467001	19950606
US 5578644	A	19961126	US 1995-471518	19950606
US 5580902	A	19961203	US 1995-465699	19950606
US 5583156	A	19961210	US 1995-467895	19950606
US 5599843	A	19970204	US 1995-471529	19950606
US 5612376	A	19970318	US 1995-465703	19950606
US 5637615	A	19970610	US 1995-467153	19950606
US 5643961	A	19970701	US 1995-466737	19950606
US 5643962	A	19970701	US 1995-466740	19950606
US 5643952	A	19970701	US 1995-466770	19950606
US 5643953	A	19970701	US 1995-467156	19950606
US 5643963	A	19970701	US 1995-471523	19950606
US 5648395	A	19970715	US 1995-466739	19950606
US 5648391	A	19970715	US 1995-469812	19950606
US 5648388	A	19970715	US 1995-471511	19950606
US 5650436	A	19970722	US 1995-467134	19950606
US 5650437	A	19970722	US 1995-470060	19950606
US 5650440	A	19970722	US 1995-471513	19950606
US 5652267	A	19970729	US 1995-469814	19950606
US 5654340	A	19970805	US 1995-467989	19950606
US 5656665	A	19970812	US 1995-466771	19950606
US 5656666	A	19970812	US 1995-470829	19950606
US 5670542	A	19970923	US 1995-465700	19950606
US 5670543	A	19970923	US 1995-471521	19950606
US 5674899	A	19971007	US 1995-465704	19950606
US 5674903	A	19971007	US 1995-468079	19950606
US 5677339	A	19971014	US 1995-466820	19950606

US 5677340	A	19971014
US 5716992	A	19980210
US 5827882	A	19981027
US 5554652	A	19960910
US 5554654	A	19960910
US 5561157	A	19961001
US 5571837	A	19961105
US 5621006	A	19970415
US 5654336	A	19970805
US 5681853	A	19971028
US 5684044	A	19971104
US 5690967	A	19971125
US 5691378	A	19971125
CA 1339706	A1	19980310
US 5889054	A	19990330
US 5962526	A	19991005
US 5856357	A	19990105
US 6060512	A	20000509
US 6051609	A	20000418
US 6384079	B1	20020507
US 6191167	B1	20010220
US 2003083380	A1	20030501
US 2001016604	A1	20010823
US 2003017130	A1	20030123

PRIORITY APPLN. INFO.:

US 1995-468077		19950606
US 1995-469811		19950606
US 1995-465695		19950606
US 1995-487685		19950607
US 1995-487692		19950607
US 1995-472318		19950607
US 1995-475685		19950607
US 1995-472314		19950607
US 1995-483328		19950607
US 1995-472317		19950607
US 1995-472315		19950607
US 1995-472310		19950607
US 1995-487684		19950607
CA 1995-617036		19951031
US 1997-925063		19970908
US 1997-926030		19970909
US 1997-937008		19970924
US 1998-185608		19981104
US 1998-222997		19981230
US 1999-224949		19990104
US 1999-255702		19990223
US 2000-729981		20001206
US 2001-774882		20010201
US 2002-71345		20020208
US 1986-945680	A	19861223
CA 1987-549964	A3	19871022
EP 1987-117405	A3	19871125
EP 1994-102151	A3	19871125
US 1989-393749	A3	19890815
US 1990-469738	B1	19900119
US 1990-467958	A	19900122
WO 1991-US412	W	19910121
US 1991-683437	B1	19910410
US 1991-812858	B1	19911223
US 1992-840149	B1	19920224
CA 1992-616460	A3	19920810
US 1992-936863	B1	19920827
US 1993-8112	A3	19930122
US 1993-8223	A3	19930122
US 1993-89101	A1	19930712
US 1993-117559	B1	19930907
US 1993-135841	A1	19931007
US 1994-179190	A1	19940110
US 1994-359939	A1	19941220
US 1995-478524	A1	19950607
US 1995-487684	A1	19950607
US 1997-926030	A1	19970909
US 1997-998864	A1	19971229
US 1997-998871	A3	19971229
US 1998-185608	A1	19981104
US 1998-222995	B1	19981230
US 1998-222997	A1	19981230
US 2000-510368	B1	20000222
US 2000-513225	B1	20000225
US 2001-774822	A1	20010130

OTHER SOURCE(S): MARPAT 109:216035

AB Hydroxycarboxylic acids and related ketocarboxylic acids, esters, lactones or salts enhance the therapeutic effect of topical drugs and cosmetics. Addition of 10% lactic acid strongly improved the antipsoriatic effect of topically-applied 3% thionicotinamide, in humans. A composition for prevention and treatment of oily skin comprised erythromycin 2 g aleuritic acid 2 g, EtOH 50 mL, water 40 mL and propylene glycol 6 mL.

IT **127-17-3**, Pyruvic acid, biological studies **298-12-4**,

Formylformic acid **600-22-6**, Methylpyruvate **617-35-6**, Ethylpyruvate **922-68-9 923-11-5**, Isopropylpyruvate **924-44-7**, Ethyl formylformate **925-61-1 1113-60-6**, Hydroxypyruvic acid **3913-50-6 20279-43-0**
RL: BIOL (Biological study)
(topical drug activity enhancement by)

IT **144-82-1**, Sulfamethizole **7704-34-9**, **Sulfur**, biological studies
RL: BIOL (Biological study)
(topical drug containing, hydroxycarboxylic acids as activity enhancers for)

L34 ANSWER 15 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1984:613721 HCAPLUS
DOCUMENT NUMBER: 101:213721
TITLE: Study of the properties of **pitch** coke modified by chemically active additives
AUTHOR(S): Kulakov, V. V.; Neproshin, E. I.; Fedeneva, E. N.
CORPORATE SOURCE: USSR
SOURCE: Khimiya Tverdogo Topliva (Moscow, Russian Federation) (1984), (5), 132-4
CODEN: KTVTBY; ISSN: 0023-1177
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB The effect was studied of the addition of 1-10% S, (NH4)2S2O8, Fe oxalate (I) [**15843-42-2**], hydroquinone [123-31-9], AlCl3, or B to coal-tar **pitch** on the yield, mech. strength, and reactivity of cokes prepared from this **pitch**. Thus, addition of B had no effect on the coke yield but increased its strength and decreased its activity. The best overall coke properties were obtained when the **pitch** contained 1% I.

IT **7704-34-9**, properties **15843-42-2**
RL: PRP (Properties)
(coal-tar **pitch** containing, properties and yield of cokes from)

L34 ANSWER 16 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1979:528058 HCAPLUS
DOCUMENT NUMBER: 91:128058
TITLE: Reagent hazards
AUTHOR(S): Anon.
CORPORATE SOURCE: Japan
SOURCE: A&R (1978), 16(10), 458-63
CODEN: ARRRDM; ISSN: 0386-1902
DOCUMENT TYPE: Journal; General Review
LANGUAGE: Japanese

AB A review with 3 refs.

IT **144-62-7**, uses and miscellaneous **7446-09-5**, biological studies **7704-34-9**, biological studies **7783-06-4**, uses and miscellaneous **8014-95-7 10545-99-0**
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(health hazards and safety in handling of)

L34 ANSWER 17 OF 17 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1954:74910 HCAPLUS
DOCUMENT NUMBER: 48:74910
ORIGINAL REFERENCE NO.: 48:13238c-f
TITLE: Retardation of oxidation of rosin
AUTHOR(S): Mitra, S. P.
CORPORATE SOURCE: Univ. Allahabad
SOURCE: Proceedings of the National Academy of Sciences, India (1951), 20A, 132-9
CODEN: NAIPAQ; ISSN: 0369-3236
DOCUMENT TYPE: Journal

LANGUAGE: Unavailable
AB The retarding effect of a number of antioxidants on the auto-oxidation of molten rosin at 200° was determined The concentration of antioxidant was 0.001M and the rate of air flow was 738-44 cc./min. The effectiveness of the antioxidants after 10 hrs. decreased in the order: gallic acid (I), vanillin, o-nitroaniline, pyrogallol, guaiacol, phenol, metol, thymol, o-aminophenol, Na tartarate, resorcinol, hydroquinone, o-nitrophenol, Na citrate, salicylic acid, 2-naphthol, Na2SO3, BzH, anthraquinone, S, phloroglucinol, tannic acid, glucose, anthracene, H2SO4, 1-naphthol (II), cane sugar (III), oxalic acid (IV), phenanthrene (V), and iodine. II, III, IV, V, and iodine gave a smaller amount of oxidized product after 2 hrs. than the control containing no antioxidant and a larger amount after 10 hrs. S gave more oxidized product after 2 hrs. and less after 10 hrs. than the control. The rate of oxidation in the presence of I was increased by increasing the rate of air flow, raising the temperature, or decreasing the concentration of I. It is postulated that the effectiveness of an antioxidant B is dependent upon its ability to form a nonreactive compound AOB with the autocatalytic agent AO formed by the action of O on the substance A.
IT **144-62-7**, Oxalic acid **7704-34-9**, **Sulfur**
(as antioxidant for rosin)

=> select hit rn l34 1-17
E1 THROUGH E27 ASSIGNED

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DICTIONARY FILE UPDATES: 30 JUN 2004 HIGHEST RN 701907-96-2

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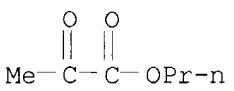
FILE 'REGISTRY' ENTERED AT 12:16:33 ON 01 JUL 2004
L35 27 S E1-E27
L36 20 S L35 AND L17

=> d ide can l36 1-20

L36 ANSWER 1 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
RN **20279-43-0** REGISTRY

CN Propanoic acid, 2-oxo-, propyl ester (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Pyruvic acid, propyl ester (7CI, 8CI)
OTHER NAMES:
CN Propyl 2-oxopropionate
CN Propyl pyruvate
FS 3D CONCORD
MF C6 H10 O3
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RL.NP Roles from non-patents: ANST (Analytical study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

37 REFERENCES IN FILE CA (1907 TO DATE)
37 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 139:341779

REFERENCE 2: 139:333129

REFERENCE 3: 138:90080

REFERENCE 4: 138:20906

REFERENCE 5: 137:109059

REFERENCE 6: 134:326021

REFERENCE 7: 134:326020

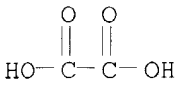
REFERENCE 8: 134:285591

REFERENCE 9: 133:79034

REFERENCE 10: 131:144323

L36 ANSWER 2 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
RN **15843-42-2** REGISTRY
CN Ethanedioic acid, iron salt (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Iron oxalate (6CI, 7CI)
CN Oxalic acid, iron salt (8CI)
DR 17856-16-5
MF C2 H2 O4 . x Fe
LC STN Files: BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMLIST, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, PIRA, TOXCENTER, TULSA, USPAT2, USPATFULL
(*File contains numerically searchable property data)

Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Conference; Journal; Patent; Report
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
RLD.P Roles for non-specific derivatives from patents: USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
RLD.NP Roles for non-specific derivatives from non-patents: FORM (Formation, nonpreparative); PREP (Preparation); PROC (Process); USES (Uses)
CRN (144-62-7)



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148 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
148 REFERENCES IN FILE CAPLUS (1907 TO DATE)
45 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:426223

REFERENCE 2: 140:323985

REFERENCE 3: 140:99607

REFERENCE 4: 139:373432

REFERENCE 5: 139:201747

REFERENCE 6: 139:102446

REFERENCE 7: 138:398400

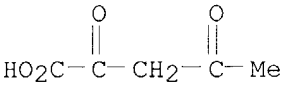
REFERENCE 8: 138:261847

REFERENCE 9: 138:90184

REFERENCE 10: 137:188515

L36 ANSWER 3 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
RN **5699-58-1** REGISTRY
CN Pentanoic acid, 2,4-dioxo- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Valeric acid, 2,4-dioxo- (6CI, 8CI)
OTHER NAMES:
CN 2,4-Dioxopentanoic acid
CN Acetoneoxalic acid
CN Acetopyruvic acid
CN Acetylpyruvic acid
FS 3D CONCORD
MF C5 H6 O4

CI COM
LC STN Files: BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMLIST, HODOC*, MEDLINE, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Conference; Journal; Patent
RL.P Roles from patents: BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
RLD.P Roles for non-specific derivatives from patents: RACT (Reactant or reagent)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological study)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

50 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
50 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:195305

REFERENCE 2: 140:177189

REFERENCE 3: 140:156740

REFERENCE 4: 139:17115

REFERENCE 5: 138:217259

REFERENCE 6: 137:190733

REFERENCE 7: 134:188159

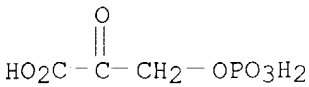
REFERENCE 8: 131:319458

REFERENCE 9: 131:296961

REFERENCE 10: 127:307382

L36 ANSWER 4 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
RN **3913-50-6** REGISTRY
CN Propanoic acid, 2-oxo-3-(phosphonooxy)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Pyruvic acid, hydroxy-, di-H phosphate (7CI)
CN Pyruvic acid, hydroxy-, dihydrogen phosphate (8CI)
CN Pyruvic acid, hydroxy-, phosphate (6CI)
OTHER NAMES:
CN Phosphohydroxypyruvic acid
FS 3D CONCORD

MF C3 H5 O7 P
CI COM
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CHEMCATS, MEDLINE, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Conference; Journal; Patent
RL.P Roles from patents: BIOL (Biological study); FORM (Formation, nonpreparative)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process); RACT (Reactant or reagent); NORL (No role in record)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

40 REFERENCES IN FILE CA (1907 TO DATE)
40 REFERENCES IN FILE CAPLUS (1907 TO DATE)
10 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 135:314428

REFERENCE 2: 127:30825

REFERENCE 3: 124:80279

REFERENCE 4: 115:178807

REFERENCE 5: 115:44949

REFERENCE 6: 115:25308

REFERENCE 7: 114:3531

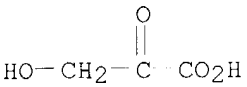
REFERENCE 8: 111:73667

REFERENCE 9: 109:216035

REFERENCE 10: 108:163938

L36 ANSWER 5 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
RN **1113-60-6** REGISTRY
CN Propanoic acid, 3-hydroxy-2-oxo- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Pyruvic acid, hydroxy- (6CI, 8CI)
OTHER NAMES:
CN β-Hydroxypyruvic acid
CN 2-Oxo-3-hydroxypropionic acid
CN 3-Hydroxypyruvic acid
CN Hydroxypyruvic acid
FS 3D CONCORD
MF C3 H4 O4
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, EMBASE, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, NAPRALERT, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

DT.CA CAplus document type: Conference; Dissertation; Journal; Patent; Report
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological study); PRP (Properties)



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420 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
421 REFERENCES IN FILE CAPLUS (1907 TO DATE)
46 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:372074

REFERENCE 2: 140:267345

REFERENCE 3: 140:265629

REFERENCE 4: 140:231427

REFERENCE 5: 140:231372

REFERENCE 6: 140:157478

REFERENCE 7: 140:141611

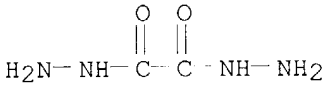
REFERENCE 8: 140:4124

REFERENCE 9: 139:396127

REFERENCE 10: 139:175798

L36 ANSWER 6 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
RN **996-98-5** REGISTRY
CN Ethanedioic acid, dihydrazide (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Oxalic acid, dihydrazide (6CI, 7CI, 8CI)
OTHER NAMES:
CN NSC 264
CN Oxaldihydrazide
CN Oxalhydrazide
CN Oxalic acid bishydrazide
CN Oxalic acid hydrazide
CN Oxalic dihydrazide
CN Oxaloyl dihydrazide
CN Oxaloylhydrazine
CN Oxalyl dihydrazide
CN Oxalyl hydrazide

FS 3D CONCORD
DR 3011-40-3
MF C2 H6 N4 O2
CI COM
LC STN Files: BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, DETHERM*, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, MEDLINE, NIOSHTIC, RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Conference; Dissertation; Journal; Patent; Report
RL.P Roles from patents: BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.P Roles for non-specific derivatives from patents: PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

365 REFERENCES IN FILE CA (1907 TO DATE)
14 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
366 REFERENCES IN FILE CAPLUS (1907 TO DATE)
38 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 141:14233

REFERENCE 2: 140:425095

REFERENCE 3: 140:329404

REFERENCE 4: 140:287329

REFERENCE 5: 139:402862

REFERENCE 6: 139:268017

REFERENCE 7: 139:166904

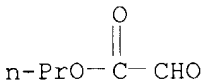
REFERENCE 8: 139:22823

REFERENCE 9: 139:8799

REFERENCE 10: 138:411096

L36 ANSWER 7 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
RN **925-61-1** REGISTRY
CN Acetic acid, oxo-, propyl ester (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Glyoxylic acid, propyl ester (7CI, 8CI)

FS 3D CONCORD
MF C5 H8 O3
LC STN Files: CA, CAOLD, CAPLUS, TOXCENTER, USPATFULL
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); NORL (No role in record)
RL.NP Roles from non-patents: FORM (Formation, nonpreparative); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

10 REFERENCES IN FILE CA (1907 TO DATE)
10 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:35307

REFERENCE 2: 139:323269

REFERENCE 3: 139:52881

REFERENCE 4: 136:53424

REFERENCE 5: 133:135312

REFERENCE 6: 131:317794

REFERENCE 7: 126:199277

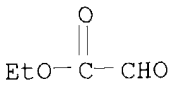
REFERENCE 8: 109:216035

REFERENCE 9: 62:58560

REFERENCE 10: 62:58559

L36 ANSWER 8 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
RN **924-44-7** REGISTRY
CN Acetic acid, oxo-, ethyl ester (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Glyoxylic acid, ethyl ester (6CI, 7CI, 8CI)
OTHER NAMES:
CN Ethyl glyoxylate
CN Ethyl oxoacetate
CN NSC 49206
CN Oxoacetic acid ethyl ester
FS 3D CONCORD
MF C4 H6 O3
CI COM
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, IFICDB, IFIPAT, IFIUDB, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Conference; Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PROC

(Process); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.P Roles for non-specific derivatives from patents: PREP (Preparation); RACT (Reactant or reagent)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: PREP (Preparation); RACT (Reactant or reagent)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

639 REFERENCES IN FILE CA (1907 TO DATE)
6 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
645 REFERENCES IN FILE CAPLUS (1907 TO DATE)
14 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 141:7323

REFERENCE 2: 141:7098

REFERENCE 3: 140:433476

REFERENCE 4: 140:423439

REFERENCE 5: 140:423430

REFERENCE 6: 140:406826

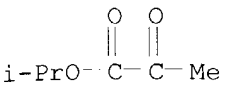
REFERENCE 7: 140:391493

REFERENCE 8: 140:391297

REFERENCE 9: 140:357038

REFERENCE 10: 140:339203

L36 ANSWER 9 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
RN **923-11-5** REGISTRY
CN Propanoic acid, 2-oxo-, 1-methylethyl ester (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Pyruvic acid, isopropyl ester (7CI, 8CI)
OTHER NAMES:
CN Isopropyl pyruvate
FS 3D CONCORD
MF C6 H10 O3
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Conference; Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RL.NP Roles from non-patents: PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); NORL (No role in record)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

49 REFERENCES IN FILE CA (1907 TO DATE)
49 REFERENCES IN FILE CAPLUS (1907 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 138:187391

REFERENCE 2: 138:90080

REFERENCE 3: 137:320306

REFERENCE 4: 137:257698

REFERENCE 5: 137:109059

REFERENCE 6: 135:247013

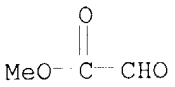
REFERENCE 7: 135:210607

REFERENCE 8: 135:195246

REFERENCE 9: 134:326021

REFERENCE 10: 134:326020

L36 ANSWER 10 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
RN **922-68-9** REGISTRY
CN Acetic acid, oxo-, methyl ester (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Glyoxylic acid, methyl ester (7CI, 8CI)
OTHER NAMES:
CN Methyl glyoxylate
CN Methyl oxoacetate
CN Oxoacetic acid methyl ester
FS 3D CONCORD
MF C3 H4 O3
CI COM
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, IFICDB, IFIPAT, IFIUDB, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Conference; Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.P Roles for non-specific derivatives from patents: PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: PRP (Properties)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

446 REFERENCES IN FILE CA (1907 TO DATE)
5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
447 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:303317

REFERENCE 2: 140:287568

REFERENCE 3: 140:253384

REFERENCE 4: 140:236089

REFERENCE 5: 140:181288

REFERENCE 6: 140:111435

REFERENCE 7: 140:95896

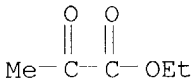
REFERENCE 8: 140:76931

REFERENCE 9: 140:35307

REFERENCE 10: 140:16701

L36 ANSWER 11 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
RN **617-35-6** REGISTRY
CN Propanoic acid, 2-oxo-, ethyl ester (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Pyruvic acid, ethyl ester (6CI, 7CI, 8CI)
OTHER NAMES:
CN 2-Oxopropanoic acid ethyl ester
CN Ethyl 2-oxopropanoate
CN Ethyl 2-oxopropionate
CN Ethyl methylglyoxylate
CN Ethyl pyruvate
CN NSC 48386
FS 3D CONCORD
MF C5 H8 O3
CI COM
LC STN Files: ADISINSIGHT, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DETHERM*, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, PROMT, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Conference; Dissertation; Journal; Patent; Report
RL.P Roles from patents: BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses); NORL (No role in

record)
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: PREP (Preparation); RACT (Reactant or reagent)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1425 REFERENCES IN FILE CA (1907 TO DATE)
6 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1430 REFERENCES IN FILE CAPLUS (1907 TO DATE)
44 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 141:6895

REFERENCE 2: 141:6718

REFERENCE 3: 140:425209

REFERENCE 4: 140:357670

REFERENCE 5: 140:357015

REFERENCE 6: 140:339635

REFERENCE 7: 140:338102

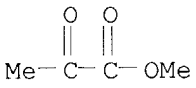
REFERENCE 8: 140:333992

REFERENCE 9: 140:323150

REFERENCE 10: 140:323124

L36 ANSWER 12 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
RN **600-22-6** REGISTRY
CN Propanoic acid, 2-oxo-, methyl ester (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Pyruvic acid, methyl ester (6CI, 7CI, 8CI)
OTHER NAMES:
CN 2-Oxopropanoic acid methyl ester
CN Methyl 2-oxopropanoate
CN Methyl 2-oxopropionate
CN Methyl acetoformate
CN Methyl pyruvate
CN Methylglyoxylic acid methyl ester
CN NSC 65430
FS 3D CONCORD
MF C4 H6 O3
CI COM
LC STN Files: AGRICOLA, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, DETHERM*, HODOC*, IFICDB, IFIPAT, IFIUDB, MEDLINE, SPECINFO, TOXCENTER, USPAT2, USPATFULL

(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Conference; Dissertation; Journal; Patent; Report
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.P Roles for non-specific derivatives from patents: RACT (Reactant or reagent)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: FORM (Formation, nonpreparative); PROC (Process); PRP (Properties); RACT (Reactant or reagent)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

827 REFERENCES IN FILE CA (1907 TO DATE)
8 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
830 REFERENCES IN FILE CAPLUS (1907 TO DATE)
17 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:406383

REFERENCE 2: 140:359317

REFERENCE 3: 140:356933

REFERENCE 4: 140:339342

REFERENCE 5: 140:338950

REFERENCE 6: 140:338874

REFERENCE 7: 140:321385

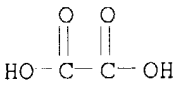
REFERENCE 8: 140:321004

REFERENCE 9: 140:299427

REFERENCE 10: 140:276769

L36 ANSWER 13 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
RN **563-72-4** REGISTRY
CN Ethanedioic acid, calcium salt (1:1) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Oxalic acid, calcium salt (1:1) (8CI)
OTHER NAMES:
CN Calcium oxalate (1:1)
MF C2 H2 O4 . Ca
CI COM
LC STN Files: ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CSCHEM, DETHERM*, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA, MRCK*, NIOSHTIC, SPECINFO,

TOXCENTER, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Book; Conference; Dissertation; Journal; Patent; Report
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological study); PROC (Process); PRP (Properties); RACT (Reactant or reagent)
CRN (144-62-7)



● Ca

2807 REFERENCES IN FILE CA (1907 TO DATE)
7 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2810 REFERENCES IN FILE CAPLUS (1907 TO DATE)
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:422492

REFERENCE 2: 140:419106

REFERENCE 3: 140:393165

REFERENCE 4: 140:390871

REFERENCE 5: 140:389791

REFERENCE 6: 140:388643

REFERENCE 7: 140:385525

REFERENCE 8: 140:376903

REFERENCE 9: 140:376457

REFERENCE 10: 140:373375

L36 ANSWER 14 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
RN **433-48-7** REGISTRY
CN Propanoic acid, 3-fluoro-2-oxo- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Pyruvic acid, fluoro- (6CI, 7CI, 8CI)
OTHER NAMES:
CN β-Fluoropyruvic acid
CN 3-Fluoropyruvic acid

CN Fluoropyruvic acid
CN NSC 21734
FS 3D CONCORD
MF C3 H3 F O3
CI COM
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CSCHEM, IFICDB, IFIPAT, IFIUDB, MEDLINE, RTECS*, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Conference; Dissertation; Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses)
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PROC (Process); RACT (Reactant or reagent)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological study)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

121 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
121 REFERENCES IN FILE CAPLUS (1907 TO DATE)
20 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 139:291180

REFERENCE 2: 139:226463

REFERENCE 3: 138:362652

REFERENCE 4: 138:183027

REFERENCE 5: 138:69813

REFERENCE 6: 137:190733

REFERENCE 7: 136:397729

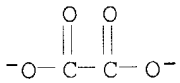
REFERENCE 8: 136:354256

REFERENCE 9: 136:231340

REFERENCE 10: 136:215515

L36 ANSWER 15 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
RN **338-70-5** REGISTRY
CN Ethanedioic acid, ion(2-) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Oxalic acid, ion(2-) (8CI)
OTHER NAMES:
CN Oxalate (C2O42-)
CN Oxalate dianion
CN Oxalate ion (C2O42-)
CN Oxalate ion(2-)

CN Oxalate(2-)
FS 3D CONCORD
MF C2 O4
CI COM
LC STN Files: ANABSTR, BEILSTEIN*, BIOSIS, CA, CAPLUS, CASREACT, CSNB, GMELIN*, IFICDB, IFIPAT, IFIUDB, NIOSHTIC, SPECINFO, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Conference; Dissertation; Journal; Patent; Report
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PROC (Process); RACT (Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)



1574 REFERENCES IN FILE CA (1907 TO DATE)
33 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1579 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:11143

REFERENCE 2: 141:11107

REFERENCE 3: 140:429747

REFERENCE 4: 140:428482

REFERENCE 5: 140:411749

REFERENCE 6: 140:409628

REFERENCE 7: 140:402585

REFERENCE 8: 140:395128

REFERENCE 9: 140:384733

REFERENCE 10: 140:364510

L36 ANSWER 16 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
RN **298-12-4** REGISTRY
CN Acetic acid, oxo- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Glyoxylic acid (8CI)
OTHER NAMES:
CN α-Ketoacetic acid
CN Formylformic acid
CN Glyoxalic acid

CN NSC 27785
CN Oxalaldehydic acid
CN Oxoacetic acid
CN Oxoethanoic acid
FS 3D CONCORD
MF C2 H2 O3
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DRUGU, EMBASE, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PIRA, PROMT, PS, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Book; Conference; Dissertation; Journal; Patent; Report
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
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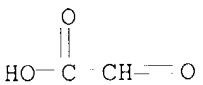
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4641 REFERENCES IN FILE CA (1907 TO DATE)
158 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
4649 REFERENCES IN FILE CAPLUS (1907 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 141:11555

REFERENCE 2: 141:8822

REFERENCE 3: 141:6622

REFERENCE 4: 141:2744

REFERENCE 5: 140:433196

REFERENCE 6: 140:425184

REFERENCE 7: 140:420265

REFERENCE 8: 140:420063

REFERENCE 9: 140:405731

REFERENCE 10: 140:396579

L36 ANSWER 17 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
RN **144-62-7** REGISTRY
CN Ethanedioic acid (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Oxalic acid (8CI)
OTHER NAMES:
CN Aktisal
CN Aquisal
CN NSC 132055
CN NSC 151956
CN NSC 62774
CN NSC 76990
CN Oxagel
CN Ultraplast Activate S 52
FS 3D CONCORD
DR 63504-28-9, 97993-78-7, 216451-38-6
MF C2 H2 O4
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, PS, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL, VETU, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Book; Conference; Dissertation; Journal; Patent; Preprint; Report
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.P Roles for non-specific derivatives from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
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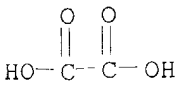


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

27580 REFERENCES IN FILE CA (1907 TO DATE)

1727 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
27614 REFERENCES IN FILE CAPLUS (1907 TO DATE)
6 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 141:15961

REFERENCE 2: 141:15954

REFERENCE 3: 141:13508

REFERENCE 4: 141:13495

REFERENCE 5: 141:13418

REFERENCE 6: 141:12822

REFERENCE 7: 141:12268

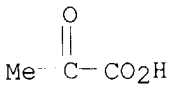
REFERENCE 8: 141:11974

REFERENCE 9: 141:11725

REFERENCE 10: 141:11422

L36 ANSWER 18 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
RN **127-17-3** REGISTRY
CN Propanoic acid, 2-oxo- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Pyruvic acid (8CI)
OTHER NAMES:
CN α-Ketopropionic acid
CN 2-Oxopropanoic acid
CN 2-Oxopropionic acid
CN Acetylformic acid
CN BTS
CN NSC 179
CN Pyroracemic acid
FS 3D CONCORD
DR 1892-67-7
MF C3 H4 O3
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIPPR*, DRUGU, EMBASE, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, PS, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, USPAT2, USPATFULL, VETU, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Book; Conference; Dissertation; Journal; Patent; Report
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); CMBI (Combinatorial study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.P Roles for non-specific derivatives from patents: ANST (Analytical study); BIOL (Biological study); CMBI (Combinatorial study); FORM (Formation, nonpreparative); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological

study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

22175 REFERENCES IN FILE CA (1907 TO DATE)
278 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
22194 REFERENCES IN FILE CAPLUS (1907 TO DATE)
9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 141:5126

REFERENCE 2: 141:4159

REFERENCE 3: 141:4157

REFERENCE 4: 141:3737

REFERENCE 5: 141:3430

REFERENCE 6: 141:3207

REFERENCE 7: 141:1169

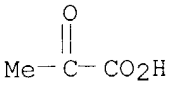
REFERENCE 8: 140:432424

REFERENCE 9: 140:422905

REFERENCE 10: 140:422647

L36 ANSWER 19 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
RN **113-24-6** REGISTRY
CN Propanoic acid, 2-oxo-, sodium salt (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Pyruvic acid, sodium salt (7CI, 8CI)
OTHER NAMES:
CN Sodium α-ketopropionate
CN Sodium pyruvate
DR 220803-31-6
MF C3 H4 O3 . Na
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MSDS-OHS, NIOSHTIC, PROMT, PS, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Conference; Dissertation; Journal; Patent; Report
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); MSC (Miscellaneous); PREP (Preparation); PROC (Process); PRP

(Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); CMBI (Combinatorial study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
CRN (127-17-3)



1007 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1009 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 141:5889

REFERENCE 2: 141:5851

REFERENCE 3: 140:422476

REFERENCE 4: 140:420208

REFERENCE 5: 140:385780

REFERENCE 6: 140:356211

REFERENCE 7: 140:333767

REFERENCE 8: 140:320131

REFERENCE 9: 140:283992

REFERENCE 10: 140:249106

L36 ANSWER 20 OF 20 REGISTRY COPYRIGHT 2004 ACS on STN
RN **78-98-8** REGISTRY
CN Propanal, 2-oxo- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Pyruvaldehyde (8CI)
OTHER NAMES:
CN α-Ketopropionaldehyde
CN 2-Ketopropionaldehyde
CN 2-Oxopropanal
CN 2-Oxopropionaldehyde
CN Acetylformaldehyde
CN Acetylformyl
CN Methylglyoxal
CN NSC 626580
CN NSC 79019
CN Pyroracemic aldehyde
CN Pyruvic aldehyde

FS 3D CONCORD
MF C3 H4 O2
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NAPRALERT, NIOSHTIC, PIRA, PROMT, PS, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Book; Conference; Dissertation; Journal; Patent; Report
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); CMBI (Combinatorial study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
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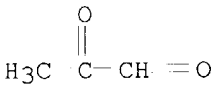

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2573 REFERENCES IN FILE CA (1907 TO DATE)
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2577 REFERENCES IN FILE CAPLUS (1907 TO DATE)
8 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 141:6779

REFERENCE 2: 141:5297

REFERENCE 3: 141:3206

REFERENCE 4: 140:423872

REFERENCE 5: 140:419138

REFERENCE 6: 140:404795

REFERENCE 7: 140:375140

REFERENCE 8: 140:373275

REFERENCE 9: 140:370765

REFERENCE 10: 140:363741

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L6       589911 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L2 OR ?SULFUR?
L20        1606 SEA FILE=REGISTRY ABB=ON  PLU=ON  COLLOID? OR SUSPENSION? OR
               DISPERS?
L21     1941897 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L20 OR COLLOID? OR SUSPENSION?
                OR DISPERS?
L22      140971 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L21(L)L6
L58      151635 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ?DIONE
L59         485 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L58 AND L22
L60          24 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L59 AND (?PHARM? OR ?THERAP?
               OR ?MEDICAL? OR ?DRUG? OR ?COSMET?)


=> d ibib abs hitrn l60 1-24

L60  ANSWER 1 OF 24  HCAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         2003:551493  HCAPLUS
DOCUMENT NUMBER:          139:117337
TITLE:                    Preparation of pyrrole derivatives as androgen
                          receptor antagonists
INVENTOR(S):              Furuya, Shuichi; Matsunaga, Nobuyuki; Kusaka, Masami;
                          Hara, Takahito; Miyazaki, Junichi
PATENT ASSIGNEE(S):       Takeda Chemical Industries, Ltd., Japan
SOURCE:                   PCT Int. Appl., 306 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
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     WO 2003057669      A1   20030717       WO 2002-JP13652  20021226
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             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,
             PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
             UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
     JP 2003252854      A2   20030910       JP 2002-378462   20021226
PRIORITY APPLN. INFO.:                   JP 2001-399143   A  20011228
OTHER SOURCE(S):          MARPAT 139:117337
GI
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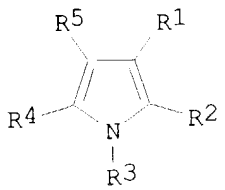


I

AB Androgen receptor antagonists and excellent preventive and **therapeutic drugs** for hormone-dependent cancers, in particular prostate cancer, are provided by compds. represented by the general formula (I) or salts or **prodrugs** thereof (wherein R1 is hydrogen or a group bonded through a carbon, nitrogen, oxygen, or **sulfur** atom; R2 is hydrogen or a group bonded through a carbon, nitrogen, oxygen, or **sulfur** atom; R3 is hydrogen, an optionally substituted hydrocarbon group, acyl, or an optionally substituted heterocyclic group; R4 is hydrogen or a group bonded through a carbon, nitrogen, oxygen, or **sulfur** atom; and R5 is an optionally substituted cyclic group). Thus, a **suspension** of 0.15 g KOH powder in 5 mL THF was cooled in an ice bath, treated dropwise with 1.0 mL Et acetoacetate, stirred at the same temperature for 15 min, treated with 0.56 g 1-nitro-4-[(1E)-2-nitro-1-propenyl]benzene (preparation given), and stirred at room temperature for 3 h to give, after workup, an intermediate which was treated with 16 mL MeOH, 1.2 mL H2O, and 0.2 mL concentrated HCl, and refluxed for 2 h to give, after workup and silica gel chromatog., 0.32 g 2,5-dimethyl-4-(4-nitrophenyl)-1-h-pyrrole-3-carboxylic acid Et ester (II). A solution of II (4.87 g) in THF was added to a **suspension** of NaH in THF in an ice bath and stirred at the same temperature for 1 h, followed by adding 2.0 mL benzyl bromide, and the resulting mixture was stirred for 3 h to give, after workup and silica gel chromatog., 1-benzyl-2,5-dimethyl-4-(4-nitrophenyl)-1-h-pyrrole-3-carboxylic acid Et ester (III). II and III in vitro inhibited the binding of radiolabeled mibolerone to wild-type LNCap androgen receptor with IC50 of 190 and 7.8 nM, resp. Various specific formulations containing compds. I, e.g. an ampule containing III, were described.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L60 ANSWER 2 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:696548 HCAPLUS
DOCUMENT NUMBER: 137:181947
TITLE: Detection of glucose in solutions also containing an alpha-hydroxy acid or a beta-diketone
INVENTOR(S): Daniloff, George Y.; Kalivretenos, Aristotle G.; Nikolaitchik, Alexandre V.
PATENT ASSIGNEE(S): Sensors for Medicine and Science, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 34 pp., Cont.-in-part of U.S. Ser. No. 754,217.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002127626	A1	20020912	US 2001-29184	20011228
US 2002090734	A1	20020711	US 2001-754217	20010105
WO 2002057788	A2	20020725	WO 2002-US199	20020104
WO 2002057788	A3	20031127		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1388014	A2	20040211	EP 2002-713356	20020104

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

US 2003082663	A1	20030501	US 2002-187903		20020703
PRIORITY APPLN. INFO.:			US 2001-754217	A2	20010105
			US 2001-269887P	P	20010221
			US 2001-329746P	P	20011018
			US 2001-29184	A	20011228
			WO 2002-US199	W	20020104
			US 2002-363885P	P	20020314

OTHER SOURCE(S): MARPAT 137:181947

AB The invention concerns compns. and methods for determining the presence or concentration of glucose in a sample which may also contain an alpha-hydroxy acid or a beta-diketone. The method uses a compound having at least two recognition elements for glucose, oriented such that the interaction between the compound and glucose is more stable than the interaction between the compound and the alpha-hydroxy acid or beta-diketone, such that the presence of the alpha-hydroxy acid or the beta-diketone does not substantially interfere with said determination

IT **7704-34-9D, Sulfur**, derivs.
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(detection of glucose in solns. also containing alpha-hydroxy acid or a beta-diketone)

L60 ANSWER 3 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:429542 HCAPLUS
DOCUMENT NUMBER: 137:11003
TITLE: Chondroprotective/restorative compositions containing hyaluronic acid
INVENTOR(S): Pierce, Scott W.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 14 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2002068718	A1	20020606	US 2001-967977		20011002
PRIORITY APPLN. INFO.:			US 2000-237838P	P	20001003

AB An oral composition based on hyaluronic acid or its salts and optionally a **therapeutic drug** is provided for treating or preventing osteoarthritis, joint effusion, joint inflammation and pain, synovitis, lameness, post-operative arthroscopic surgery, deterioration of proper joint function including joint mobility, the reduction or inhibition of metabolic activity of chondrocytes, the activity of enzymes that degrade cartilage, and the reduction or inhibition of the production of hyaluronic acid in a mammal. Addnl., compns. containing hyaluronic acid, chondroitin sulfate and glucosamine sulfate in a paste formulation are also described which can be administered on their own or can be used as a feed additive for cats and dogs. For example, a composition contained (by weight) glucosamine sulfate 36%, chondroitin sulfate 4%, sodium hyaluronate 0.144%, manganese sulfate 0.144%, ibuprofen 200 mg, powdered sugar 20%, glycerin 0.7%, xanthan gum 0.2%, sodium benzoate 0.7%, citric acid 0.2%, molasses 23.5%, and water 14.4%.

IT **7704-34-9, Sulfur**, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chondroprotective/restorative compns. containing hyaluronic acid for treatment of joint disorders)

L60 ANSWER 4 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:240593 HCAPLUS

DOCUMENT NUMBER: 136:268181
TITLE: Solid preparations containing a large amount of a physiologically active substance
INVENTOR(S): Nakano, Yoshinori; Yoneyama, Shuji; Ochi, Masashi
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 81 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002024230	A1	20020328	WO 2001-JP8264	20010921
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001088102	A5	20020402	AU 2001-88102	20010921
JP 2002167327	A2	20020611	JP 2001-290149	20010921
EP 1319409	A1	20030618	EP 2001-967797	20010921
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2004034039	A1	20040219	US 2003-380725	20030729

PRIORITY APPLN. INFO.: JP 2000-289345 A 20000922
WO 2001-JP8264 W 20010921

OTHER SOURCE(S): MARPAT 136:268181

AB It is intended to provide granules containing a large amount of a physiol. active substance which is hardly soluble in water and highly water-repellent, and solid prepns. containing these granules which are excellent in the disintegration properties and the elution of the physiol. active substance. Disclosed are (1) granules containing a physiol. active substance and a cellulose-based disintegrating agent; (2) granules containing a physiol. active substance, a cellulose-based disintegrating agent and a binder; (3) solid prepns. comprising granules (1) or (2) as described above, a cellulose-based disintegrating agent and a stearic acid-based lubricant; and (4) the solid prepns. (3) as described above which are shaped into ellipsoidal tablets. A tablet was formulated containing 5-(N-benzyl-N-methylaminomethyl)-1-(2,6-difluorobenzyl)-6-[4-(3-methoxyureido)phenyl]-3-phenylthieno[2,3-d]pyrimidine-2,4(1H,3H)-**dione** (preparation given) 100, lactose 285, starch 50, hydroxypropyl cellulose 20, Ca carmellose 40, 40 and Mg stearate 5 mg. The tablet was coated with a composition containing hydroxypropyl Me cellulose 17.8, titania 2, and iron oxide 0.2 mg.

IT **7704-34-9, Sulfur**, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of phenylthienopyrimidinone derivs. and oral formulations containing them)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L60 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:923639 HCAPLUS
DOCUMENT NUMBER: 136:58811
TITLE: Biodegradable polymers for sustained-release compositions
INVENTOR(S): Hata, Yoshio; Yamagata, Yutaka; Igari, Yasutaka
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., USA

SOURCE: PCT Int. Appl., 64 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001095940	A1	20011220	WO 2001-JP5009	20010613
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2001064264	A5	20011224	AU 2001-64264	20010613
EP 1291023	A1	20030312	EP 2001-938630	20010613
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2002068982	A2	20020308	JP 2001-180061	20010614
US 2004023987	A1	20040205	US 2002-297695	20021206

PRIORITY APPLN. INFO.: JP 2000-178534 A 20000614
WO 2001-JP5009 W 20010613

AB Disclosed are compns. containing a nonpeptidyl physiol. active substance and a biodegradable polymer having two or more terminal carboxyl groups or its salt which have the following characteristics: (1) the content of the nonpeptidyl physiol. active substance can be elevated and the release thereof can be regulated or accelerated to thereby ensure the achievement of the **pharmacol.** effect; (2) in case where the nonpeptidyl physiol. active substance has s.c. irritation, it is expected that the irritation can be overcome by the terminal groups having a high acidity; and (3) having a high glass transition point and thus being highly stable. 5-(N-Benzyl-N-methylaminomethyl)-1-(2,6-difluorobenzyl)-6-[4-(3-methoxyureido)phenyl]-3-phenylthieno[2,3-d]pyrimidine-2,4(1H,3H)-**dione** was prepared and formulated with tartronic acid-terminated polylactic acid to give microcapsules.

IT **7704-34-9**, **Sulfur**, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of thienopyrimidines and formulation with carboxy-terminated polymers for sustained release)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L60 ANSWER 6 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:798540 HCAPLUS
DOCUMENT NUMBER: 135:339201
TITLE: Comparative phenotype analysis for assessment of biologically active compounds such as antimicrobials

INVENTOR(S): Bochner, Barry
PATENT ASSIGNEE(S): Biolog, Inc., USA
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2001081920 A2 20011101 WO 2001-US40572 20010420
WO 2001081920 A3 20020822
W: JP, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR
US 6696239 B1 20040224 US 2000-556898 20000420
US 6436631 B1 20020820 US 2001-776332 20010202
EP 1274997 A2 20030115 EP 2001-971452 20010420
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR
JP 2004511207 T2 20040415 JP 2001-578955 20010420
US 2003162164 A1 20030828 US 2002-126345 20020419
WO 2003089652 A2 20031030 WO 2003-US11866 20030416
WO 2003089652 A3 20040318
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:
US 2000-556898 A 20000420
US 2001-776332 A 20010202
US 2001-285541P P 20010420
WO 2001-US40572 W 20010420
US 2002-126345 A 20020419

AB The present invention relates to using multitest panels to improve the effectiveness, throughput, and efficiency of testing and com. development of biol. active compds., in particular those useful in human, animal, and plant health. In particular, the present invention provides phenotype microarrays suitable for testing biol. active compds. for their potential application in clin., veterinary, and plant health.

IT **7704-34-9D, Sulfur**, compds., biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(comparative phenotype anal. for assessment of biol. active compds. such as antimicrobials)

L60 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:661428 HCAPLUS
DOCUMENT NUMBER: 135:227012
TITLE: Processes for the production of thienopyrimidine derivatives as **pharmaceutical** intermediates
INVENTOR(S): Fukuoka, Koichiro; Yamamoto, Hiroaki; Kimura, Kazuhiro; Kawakami, Junichi; Miki, Shokyo
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001064683	A1	20010907	WO 2001-JP1447	20010227

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD,

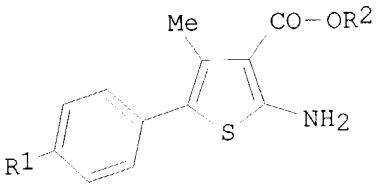
SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 2001034188	A5	20010912	AU 2001-34188	20010227
JP 2001316391	A2	20011113	JP 2001-51834	20010227
EP 1266898	A1	20021218	EP 2001-906336	20010227
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 20030055269	A1	20020827	US 2002-220233	20020827

PRIORITY APPLN. INFO.: JP 2000-105769 A 20000229
WO 2001-JP1447 W 20010227

OTHER SOURCE(S): CASREACT 135:227012; MARPAT 135:227012

GI



I

AB This document discloses processes for mass-producing on an industrial scale intermediates for the preparation of thienopyrimidine derivs. exhibiting GnRH (gonadotropin releasing hormone) antagonism, and so on. Specifically, a process for the production of compds. of the general formula I [R1 is hydrogen, nitro, halogeno, phthalimido, mono- or di-(alkylcarbonyl)amino, or alkoxy; and R2 is alkyl or aryl] comprises converting a phenylacetic acid derivative into an acid halide, reacting this acid halide with a malonic acid ester and magnesium alkoxide, treating the product with an acid, and reacting the resulting product with sulfur and a compound of the general formula NCCH2COOR2 [R2 = alkyl, etc.] in the presence of a primary amine. The processes make it possible to mass-produce thienopyrimidine derivs. exhibiting GnRH antagonism in high yield and high efficiency on an industrial scale by simple means.

IT **7704-34-9**, **Sulfur**, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(processes for production of thienopyrimidine derivs. as **pharmaceutical** intermediates)

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L60 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:78205 HCAPLUS
DOCUMENT NUMBER: 134:136767
TITLE: Strip pack for providing nutritional and/or **therapeutic** agents
INVENTOR(S): Hermelin, Marc S.; Kirschner, Mitchell L.
PATENT ASSIGNEE(S): Drugtech Corporation, USA
SOURCE: PCT Int. Appl., 110 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001007012	A1	20010201	WO 2000-US17959	20000630
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6375956	B1	20020423	US 1999-358540	19990722
BR 2000013173	A	20020402	BR 2000-13173	20000630
EP 1207850	A1	20020529	EP 2000-943311	20000630
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003505154	T2	20030212	JP 2001-511899	20000630

PRIORITY APPLN. INFO.: US 1999-358540 A 19990722
WO 2000-US17959 W 20000630

AB The present invention relates to a disposable dispensing apparatus which provides optimal **therapeutic** support to humans and other animals by conveniently supplying a complex dosing regimen requiring simultaneous administration of storage-incompatible or unevenly dosed components in a shelf stable user-friendly format. The present invention is particularly useful for humans with special **therapeutic** needs, such as pregnant, lactating and/or menopausal women. Schematic drawing of the disposable dispensing apparatus is depicted (no data).

IT **7704-34-9**, **Sulfur**, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(strip pack for providing nutritional and/or **therapeutic** agents)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L60 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:513835 HCAPLUS
DOCUMENT NUMBER: 131:188911
TITLE: Regenerative thermal oxidation (RTO) technology to meet VOC/HAPS emissions requirements - BACT [Best Available Control Technology] and MACT [Maximum Achievable Control Technology]/LAER [Lowest Achievable Emission Rate]
AUTHOR(S): Seiwert, Joseph J., Jr.
CORPORATE SOURCE: Smith Environmental Corp., Ontario, CA, 91761, USA
SOURCE: Proceedings of the International Conference on Incineration and Thermal Treatment Technologies, Oakland, Calif., May 12-16, 1997 (1997), 259-262. University of California, Irvine: Irvine, Calif.
CODEN: 67YSAR
DOCUMENT TYPE: Conference
LANGUAGE: English

AB Regenerative Thermal Oxidation (RTO) technol. has been successfully applied for abatement of process emissions containing VOCs (volatile organic compds.) and HAPs (hazardous air pollutants) ("air toxics"). Most RTO applications to date have involved more conventional hydrocarbon compds. emitted in air streams. Based on com.-scale operating experience, this paper focuses on the design considerations and technol. requirements for advanced RTO systems handling VOC/HAP emissions including Cl-, N- and S-containing orgs., as well as particulates, CO, and NOx. Included are systems operating with low inlet O2 levels. Requirements for ancillary equipment, such as acid gas scrubbers and particulate control systems, are also reviewed from a design/performance standpoint, with the objectives of providing complete

systems to meet overall emissions regulations, minimizing operating costs and providing the utmost safety and reliability in operation. Emission performance data are presented for several unique RTO systems.

IT **7704-34-9D, Sulfur,** organic compds., processes
RL: REM (Removal or disposal); PROC (Process)
(regenerative thermal oxidation technol. to meet volatile organic compound/hazardous air pollutant emission stds.)

L60 ANSWER 10 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:795022 HCAPLUS
DOCUMENT NUMBER: 130:38396
TITLE: Preparation of thieno[2,3-d]pyrimidinediones in treatment of reversible obstructive airways disease
INVENTOR(S): Cheshire, David; Cooke, Andrew; Cooper, Martin; Donald, David; Furber, Mark; Perry, Matthew; Thorne, Philip
PATENT ASSIGNEE(S): Astra Pharmaceuticals Ltd., UK; Astra Aktiebolag
SOURCE: PCT Int. Appl., 117 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9854190	A1	19981203	WO 1998-SE935	19980518
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9876808	A1	19981230	AU 1998-76808	19980518
AU 723708	B2	20000907		
EP 991653	A1	20000412	EP 1998-924705	19980518
EP 991653	B1	20021016		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
EE 9900539	A	20000615	EE 1999-539	19980518
EE 4018	B1	20030415		
BR 9809481	A	20000620	BR 1998-9481	19980518
TR 9902904	T2	20000621	TR 1999-9902904	19980518
JP 2002500666	T2	20020108	JP 1999-500565	19980518
AT 226205	E	20021115	AT 1998-924705	19980518
PT 991653	T	20030228	PT 1998-924705	19980518
ES 2184270	T3	20030401	ES 1998-924705	19980518
CN 1122037	B	20030924	CN 1998-807378	19980518
SK 283589	B6	20031007	SK 1999-1513	19980518
RU 2225410	C2	20040310	RU 1999-128111	19980518
US 6180635	B1	20010130	US 1998-117426	19980730
MX 9910911	A	20000430	MX 1999-10911	19991125
NO 9905810	A	20000127	NO 1999-5810	19991126
US 6342502	B1	20020129	US 2000-693896	20001023
US 6469014	B1	20021022	US 2001-977944	20011017
US 2002183337	A1	20021205		
US 2003191142	A1	20031009	US 2002-265201	20021007

PRIORITY APPLN. INFO.:
SE 1997-2001 A 19970528
WO 1998-SE935 W 19980518
US 1998-117426 A1 19980730
US 2000-693896 A1 20001023

US 2001-977944 A1 20011017

OTHER SOURCE(S): CASREACT 130:38396; MARPAT 130:38396

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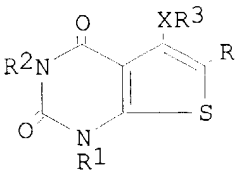


I

AB Title compds. [I; R is arylcarbonyl, aryl, arylalkyl; R1 and R2 are independently H, alkyl, alkenyl, cycloalkyl; X represents S(O)n, COO, NHCOO, etc.; R3 is Ph, pyridyl, CN, CO2H, SO2NH2, etc.; n is 0, 1, 2], stereoisomers, a **pharmaceutically**-acceptable salt or solvate are prepared via cyclization and oxidation processes. Title compds. were useful in the (prophylactic) treatment of autoimmune, inflammatory, proliferative and hyperproliferative diseases and immunol.-mediated diseases including rejection of transplanted organs or tissues and Acquired Immunodeficiency Syndrome (AIDS).

IT **7704-34-9, Sulfur**, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of thienopyrimidinediones in treatment of reversible obstructive airway disease)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L60 ANSWER 11 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1997:220542 HCAPLUS
DOCUMENT NUMBER: 126:207522
TITLE: Stat 5 SH2 domain-specific compounds for enhancement of erythropoiesis
INVENTOR(S): Dunnington, Damien John
PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA; Dunnington, Damien John
SOURCE: PCT Int. Appl., 91 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9702024	A1	19970123	WO 1996-US11158	19960628
W: AL, AM, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KG, KP, KR, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9649237	A1	19960827	AU 1996-49237	19960209
EP 809490	A1	19971203	EP 1996-905494	19960209
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI				
BR 9607614	A	19980609	BR 1996-7614	19960209
JP 10513474	T2	19981222	JP 1996-524486	19960209
EP 811159	A1	19971210	EP 1996-906615	19960212
R: BE, CH, DE, DK, FR, GB, IT, LI, NL				
JP 10513564	T2	19981222	JP 1996-524493	19960212

CA 2225666	AA	19970123	CA 1996-2225666		19960628
AU 9664055	A1	19970205	AU 1996-64055		19960628
ZA 9605499	A	19980330	ZA 1996-5499		19960628
ZA 9605500	A	19980330	ZA 1996-5500		19960628
EP 835104	A1	19980415	EP 1996-923579		19960628
R: BE, CH, DE, ES, FR, GB, IT, LI, NL					
JP 10512585	T2	19981202	JP 1996-505268		19960628
FI 9703259	A	19971008	FI 1997-3259		19970807
NO 9703659	A	19971008	NO 1997-3659		19970808
PRIORITY APPLN. INFO.:			US 1995-497357	A	19950630
			US 1996-598715	A2	19960208
			US 1995-386381	A	19950210
			US 1995-400220	A	19950307
			WO 1996-US1964	W	19960209
			WO 1996-US2490	W	19960212
			WO 1996-US11158	W	19960628

AB Invented is a method of enhancing erythropoiesis in a subject which comprises administering to the subject a **therapeutically** effective amount of a compound which binds to a human Stat 5 SH2 domain with a binding affinity greater than fifty-fold higher than the binding affinity with which the compound binds to a human Stat 6 SH2 domain, binds to a human hcp SH2 domain, a human Grb2 SH2 domain, a human SH-PTP2 SH2 domain and a human p85 SH2 domain with a binding affinity which is greater than fifty-fold lower than the binding affinity with which the compound binds to such Stat 5 SH2 domain, and binds to a human src SH2 domain, a human lck SH2 domain and a human fyn SH2 domain with a binding affinity which is greater than fifty-fold lower than the binding affinity with which the compound binds to such Stat 5 SH2 domain.

IT **7704-34-9, Sulfur**, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(Stat 5 SH2 domain-specific compds. to enhance erythropoiesis)

L60 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:	1997:192125 HCAPLUS
DOCUMENT NUMBER:	126:181352
TITLE:	Use of Stat 6 SH2 domain-specific compounds to treat allergic reactions
INVENTOR(S):	Dunnington, Damien John
PATENT ASSIGNEE(S):	Smithkline Beecham Corporation, USA; Dunnington, Damien John
SOURCE:	PCT Int. Appl., 88 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	4
PATENT INFORMATION:	

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9702023	A1	19970123	WO 1996-US11074	19960628
W: AL, AM, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KG, KP, KR, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9649237	A1	19960827	AU 1996-49237	19960209
EP 809490	A1	19971203	EP 1996-905494	19960209
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI				
BR 9607614	A	19980609	BR 1996-7614	19960209
JP 10513474	T2	19981222	JP 1996-524486	19960209
EP 811159	A1	19971210	EP 1996-906615	19960212

R: BE, CH, DE, DK, FR, GB, IT, LI, NL					
JP 10513564	T2	19981222	JP 1996-524493		19960212
CA 2225668	AA	19970123	CA 1996-2225668		19960628
AU 9664807	A1	19970205	AU 1996-64807		19960628
ZA 9605499	A	19980330	ZA 1996-5499		19960628
ZA 9605500	A	19980330	ZA 1996-5500		19960628
EP 871436	A1	19981021	EP 1996-924322		19960628
R: BE, CH, DE, ES, FR, GB, IT, LI, NL					
JP 2000514036	T2	20001024	JP 1997-505234		19960628
FI 9703259	A	19971008	FI 1997-3259		19970807
NO 9703659	A	19971008	NO 1997-3659		19970808
PRIORITY APPLN. INFO.:			US 1995-497357	A	19950630
			US 1996-598716	A	19960208
			US 1995-386381	A	19950210
			US 1995-400220	A	19950307
			WO 1996-US1964	W	19960209
			WO 1996-US2490	W	19960212
			WO 1996-US11074	W	19960628

AB Invented is a method of treating allergic reactions in a subject which comprises administering to the subject a **therapeutically** effective amount of a compound which binds to a human Stat 6 SH2 domain with a binding affinity greater than fifty-fold higher than the binding affinity with which the compound binds to a human Stat 5 SH2 domain, binds to a human hcp SH2 domain, a human Grb2 SH2 domain, a human SH-PTP2 SH2 domain and a human p85 SH2 domain with a binding affinity which is greater than fifty-fold lower than the binding affinity with which the compound binds to such Stat 6 SH2 domain, and binds to a human src SH2 domain, a human lck SH2 domain and a human fyn SH2 domain with a binding affinity which is greater than fifty-fold lower than the binding affinity with which the compound binds to such Stat 6 SH2 domain.

IT **7704-34-9, Sulfur**, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(Stat 6 SH2 domain-specific compds. to treat allergic reactions)

L60 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:	1995:580186 HCAPLUS
DOCUMENT NUMBER:	123:31620
TITLE:	Accumulated pesticide and industrial chemical findings from a ten-year study of ready-to-eat foods
AUTHOR(S):	KAN-DO Office and Pesticides Team
CORPORATE SOURCE:	U.S. Food Drug Administration, Lenexa, KS, 66285-5905, USA
SOURCE:	Journal of AOAC International (1995), 78(3), 614-31 CODEN: JAINEE; ISSN: 1060-3271
PUBLISHER:	AOAC International
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB This report lists the pesticide and industrial chems. found in the ready-to-eat foods tested repetitively for 10 yr through the U.S. Food and **Drug** Administration's Revised Market Basket Study. The study operated from 1982 to 1991. During that time 37 market baskets, each containing 234 food items that represented about 5000 food types in American diets covering all age groups, including infants and children, were collected. Each food item was individually prepared for eating; i.e., it was opened, unwrapped, washed, peeled, sliced, formulated by recipe, or cooked. Each item was then composited and anal. screened for about 300 different chems., including chlorophenoxy acids, ethylenethiourea, Me carbamates, organochlorines, organophosphates, organosulfurs, phenylureas, and pyrethroids. Overall, less that 1% of the potential of 2.5 million findings occurred for the 10-yr study period. In total, 138 different chemical residues accounted for 17,050 accumulated findings. Most findings were less than 1 μg/g, which is considered a low-level finding. Each food item averaged about 2 low-level findings per anal.

IT **7704-34-9, Sulfur,** occurrence
RL: POL (Pollutant); OCCU (Occurrence)
(industrial chems. and pesticides of ready-to-eat foods in American diet)

L60 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1994:116847 HCAPLUS
DOCUMENT NUMBER: 120:116847
TITLE: Biodegradable controlled release melt-spun delivery system
INVENTOR(S): Fuisz, Richard C.
PATENT ASSIGNEE(S): Fuisz Technologies, Ltd., USA
SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9324154	A1	19931209	WO 1993-US5307	19930602
W: AU, CA, HU, JP, KR, PL, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5518730	A	19960521	US 1992-893238	19920603
AU 9344058	A1	19931230	AU 1993-44058	19930602
AU 665844	B2	19960118		
JP 07507548	T2	19950824	JP 1994-500877	19930602
EP 746342	A1	19961211	EP 1993-914373	19930602
EP 746342	B1	20020814		
R: BE, CH, DE, DK, FR, GB, IE, IT, LI, LU, NL, SE				

PRIORITY APPLN. INFO.: US 1992-893238 A2 19920603
WO 1993-US5307 A 19930602

AB Biodegradable controlled-release delivery systems using melt-spun biodegradable polymers as carriers for bio-effecting agents such as **pharmaceutical** actives are disclosed. Oral dose forms as well as implants are described. For example, polyglycolide was melt-spun in combination with various **drugs** such as vancomycin, gentamicin, tolmetin, diphenhydramine, ibuprofen, and insulin and controlled **drug** release was demonstrated.

IT **7704-34-9, Sulfur,** biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(controlled-release **pharmaceuticals** formed by flash-flow melt-spinning containing, biodegradable polymers as carriers in)

L60 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1992:135528 HCAPLUS
DOCUMENT NUMBER: 116:135528
TITLE: Performance-oriented packaging standards; changes to classification, hazard communication, packaging and handling requirements based on UN standards and agency initiative
CORPORATE SOURCE: United States Dept. of Transportation, Washington, DC, 20590-0001, USA
SOURCE: Federal Register (1990), 55(246), 52402-729, 21 Dec 1990
CODEN: FEREAC; ISSN: 0097-6326
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The hazardous materials regulations under the Federal Hazardous Materials Transportation Act are revised based on the United Nations recommendations on the transport of dangerous goods. The regulations cover the classification of materials, packaging requirements, and package marking,

labeling, and shipping documentation, as well as transportation modes and handling, and incident reporting. Performance-oriented stds. are adopted for packaging for bulk and nonbulk transportation, and SI units of measurement generally replace US customary units. Hazardous material descriptions and proper shipping names are tabulated together with hazard class, identification nos., packing group, label required, special provisions, packaging authorizations, quantity limitations, and vessel stowage requirements.

IT **7704-34-9, Sulfur,** miscellaneous
RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process)
(packaging and transport of, stds. for)

L60 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1990:545352 HCAPLUS
DOCUMENT NUMBER: 113:145352
TITLE: Method and compositions containing linolenate and linoleate for treating Alzheimer's disease
INVENTOR(S): Yehuda, Shlomo
PATENT ASSIGNEE(S): Bar Ilan University, Israel
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 366480	A2	19900502	EP 1989-311089	19891027
EP 366480	A3	19910206		
EP 366480	B1	19940824		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
CA 1296641	A1	19920303	CA 1987-552924	19871126
US 5120763	A	19920609	US 1989-376289	19890706
IL 91802	A1	19940530	IL 1989-91802	19890927
ZA 8908096	A	19901031	ZA 1989-8096	19891025
AU 8943805	A1	19900503	AU 1989-43805	19891026
AU 620929	B2	19920227		
JP 02237919	A2	19900920	JP 1989-278812	19891027
US 5288755	A	19940222	US 1992-820562	19920114
US 5416114	A	19950516	US 1993-94769	19930720
US 5468776	A	19951121	US 1993-94770	19930720
US 5599840	A	19970204	US 1995-557677	19951113

PRIORITY APPLN. INFO.:
US 1988-263540 19881027
US 1989-359562 19890601
US 1989-376289 19890706
IL 1989-91802 19890927
IL 1986-80786 19861126
IL 1987-84273 19871025
US 1987-120830 19871116
US 1992-820562 19920114
US 1994-197241 19940216

AB Alzheimer's disease, related dementias and epilepsy are treated by administering, in absence of an oily carrier or diluent (such as C8-18 saturated fatty acids or oleic acid derivs.), to a person having the symptoms thereof, or to a person susceptible to epilepsy, a symptom-alleviating amount of a composition of matter which comprises (a) .apprx.13.0-27.5% by weight of linolenic acid and/or derivs. thereof, and (b) ≈87.0-≈72.5% by weight of linoleic acid and/or derivs. thereof, the derivs. of linolenic and linoleic acid being calculated as the free acids, and being both physiol. hydrolyzable and **pharmacol.** acceptable, or of a **pharmaceutical** formulation or nutritional composition containing

ingredients (a) and (b) in the recited proportions. The composition also contains vitamins and other substances. Thus, patients with Alzheimer's disease were given orally a mixture of linolenic acid and linoleic acid (1:4.25) for 3 wks. The conditions were markedly improved.

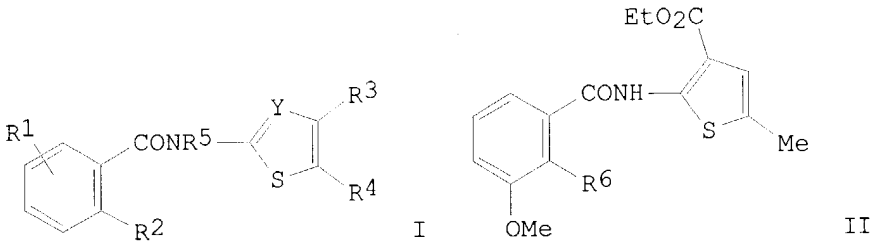
IT **7704-34-9, Sulfur**, biological studies
RL: BIOL (Biological study)
(**pharmaceutical** containing linoleate and linolenate and, for Alzheimer's disease and others)

L60 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1988:528819 HCAPLUS
DOCUMENT NUMBER: 109:128819
TITLE: Preparations of N-2-thienyl- and N-2-thiazolylbenzamides as oral antiallergy agents
INVENTOR(S): Bonifacio, Fausto; Fano, Maurizio; Trabella, Luciano; Battigelli, Giandomenico; Montagna, Davide; Bernareggi, Virgilio
PATENT ASSIGNEE(S): Valeas S.p.A. Industria Chimica e Farmaceutica, Italy
SOURCE: Eur. Pat. Appl., 33 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 261503	A1	19880330	EP 1987-113169	19870909
EP 261503	B1	19920415		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AT 74915	E	19920515	AT 1987-113169	19870909

PRIORITY APPLN. INFO.: IT 1986-21784 19860923
EP 1987-113169 19870909

OTHER SOURCE(S): MARPAT 109:128819
GI



AB The title compds. [I; R1 = H, 3-MeO, 3-OH, 3- or 5-Me, 3-, 4-, or 5-Cl; R2 = H, NO2, NH2, HCONH, AcNH, Me(CH2)nCOCONH; R3 = H, Me, RO2CCH2, RO2CCO, RO2CCHOH; R = H, Et; R4 = H, linear C1-4 alkyl, CO2R; R5 = H; R2R5 = CONH, NHCO; n = 0-3] and their **therapeutically** acceptable salts were prepared as oral allergy inhibitors. 2,3-O2N(MeO)C6H3CO2H was converted to its chloride (94.2% yield) and amidated with Et 2-amino-5-methyl-3-thiophenecarboxylate to give 79.5% thienylbenzamide II (R6 = NO2). The latter was hydrogenated over Pd/C to give 73.5% II (R6 = NH2) (III). In the passive cutaneous anaphylaxis test in rats III had an ED50 of 0.71 + 10-3 mmol/kg orally, compared to 0.32 mmol/kg for tranilast.

IT **7704-34-9, Sulfur**, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)

(cyclocondensation of, with aldehydes and cyanoacetates)

L60 ANSWER 18 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1967:436375 HCAPLUS
DOCUMENT NUMBER: 67:36375
TITLE: Proposals for the Deutschen Arzneibuch (German **Pharmacopoeia**), Seventh Edition. Propylene glycol, **chlorophenylindandione**, and determination of halogen and sulfur according to Wurzschmitt
AUTHOR(S): Striegler, G.; Gerecke, K.
CORPORATE SOURCE: Deut. Inst. Arzneimittelwesen, Berlin, Germany
SOURCE: Arzneimittelstandardisierung (1966), 7, 645-50
From: CZ 1967, (12), Abstr. No. 1720
CODEN: AZNMA6; ISSN: 0518-8369
DOCUMENT TYPE: Journal
LANGUAGE: German
AB The properties, phys. identity and purity testing, determination of the content, preservation, dosages of propylene glycol and **chlorophenylindandione**, as well as the Wurzschmitt determination of Br or Cl, of I, and of S are described.
IT **7704-34-9**, analysis
RL: ANT (Analyte); ANST (Analytical study)
(determination of)

L60 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1965:462012 HCAPLUS
DOCUMENT NUMBER: 63:62012
ORIGINAL REFERENCE NO.: 63:11265e-f
TITLE: Preparation for the treatment of acne
PATENT ASSIGNEE(S): Upjohn Co.
SOURCE: 12 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 645930		19640930	BE	19640331

AB A **pharmaceutical** preparation composed of S, neomycin, a nontoxic Al salt, and an anti-inflammatory glucocorticoid in a nontoxic vehicle is useful for topical application in the treatment of acne. A typical lotion formula contains neomycin sulfate U.S.P., colloidal S, micronized methylprednisolone acetate, Al chlorohydroxide complex, glyceryl monostearate, spermaceti, polyethylene glycol 400 stearate, Tween 85, propylene glycol, perfume oil, and H2O U.S.P.
IT **7704-34-9, Sulfur**
(acne preparation containing)

L60 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1963:26569 HCAPLUS
DOCUMENT NUMBER: 58:26569
ORIGINAL REFERENCE NO.: 58:4379e-f
TITLE: Determination of sulfur content in ointments
AUTHOR(S): Velescu, G.
SOURCE: Farmacia (Bucharest, Romania) (1962), 10, 297-8
CODEN: FRMBAZ; ISSN: 0014-8237
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB Elementary S in ointments was determined by hot filtration in vacuo, washing the remaining S with EtOH, and dissolving in CS2, followed by solvent evaporation and weighing. Apparatus employed is described.

IT **7704-34-9, Sulfur**
(analysis, determination in ointments)

L60 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1962:449309 HCAPLUS
DOCUMENT NUMBER: 57:49309
ORIGINAL REFERENCE NO.: 57:9841b-i,9842a-b
TITLE: Reactions of 2,3,5,6-tetrakis(β-hydroxyethylthio)-1,4-hydroquinone and related compounds
AUTHOR(S): Kulka, Marshall
CORPORATE SOURCE: Dominion Rubber Co. Ltd., Guelph
SOURCE: Canadian Journal of Chemistry (1962), 40, 1235-41
CODEN: CJCHAG; ISSN: 0008-4042
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
GI For diagram(s), see printed CA Issue.
AB The reaction of 2,3,5,6-tetrakis(β-hydroxyethylthio)-1,4-hydroquinone (I) with HCl is extremely sensitive to temperature I, sparkling yellow crystals, m. 144-5°, was prepared in 72% yield by stirring 100 g. chloranil (II) in 30.5 l. C6H6 at 45° during the 2 hr. addition of 200 ml. HS(CH2)2OH containing 96 g. KOH, and an addnl. 2 hrs. After standing overnight the C6H6 was decanted and the solid stirred 0.5 hr. with cold H2O, filtered, and crystallized from MeOH-H2O. The infrared spectra and the fact that I was unchanged on treatment with Zn and AcOH indicated that II is reduced in the reaction and I is the quinol. Refluxing I 2 hrs. with Ac2O and C5H5N or saturating an AcOH solution with HCl at 60° and leaving overnight gave the 2,3,5,6-tetraacetate, m. 90-1°. I was also prepared by refluxing either 2,5-dichloro-3,6-dimorpholino-1,4-benzoquinone 15 hrs. with HS(CH2)2OH and C5H5N in C6H6 or in 70% yield from 2,5-dichloro-3,6-bis(dimethylamino)-1,4-benzoquinone. At 20°, I (25 g.) left overnight in 250 ml. concentrated HCl saturated with HCl gave a hard cake which was pulverized, washed with H2O, dried, dissolved in 100 ml. CHCl3 and treated with 15 ml. SOCl2 at 30° to complete the chlorination yielding 20 g. III, m. 129-30°. When the reaction was carried out without saturation of the concentrated HCl, the results were the same but in a few runs V (see below) was obtained and no III, perhaps resulting from excess humidity. Heated at 35-7° for 6 hrs., 10 g. I in 100 ml. concentrated HCl, gave a precipitate which was extracted with CHCl3. The CHCl3 solution dried and treated with SOCl2 as above precipitated 4.5 g. V, and from the mother liquors after evaporation to dryness in vacuo and crystallization of the residue from C6H6, 3.5 g. III. III (10 g.) heated 4 hrs. on a steam bath with 50 ml. Ac2O and 2 drops H2SO4, the product evaporated in vacuo, washed with Et2O and MeOH, and crystallized from C6H6-MeOH gave 5.5 g. 6-acetate (IV), m. 120-2°, indicating the presence of one OH group. Pure 2,3,5,6-tetrakis(β-chloroethylthio)-1,4-hydroquinone (V), m. 179-81° (which has shown some curative activity in cancer **chemotherapy**), was prepared by adding 250 ml. CHCl3 to a solution of 25 g. I in 200 ml. HCl (d. 1.19) and 55 ml. H2O, refluxing 3 hrs. concentrating the CHCl3 layer (in vacuo at 40°) to 75 ml., cooling to 30°, treating at 30-35° with 15 ml. SOCl2, leaving at room temperature 3 hrs., and cooling to 0° before filtering, or by refluxing 35 g. I 0.5 hr. in 200 ml. MeOH and 40 ml. H2O with 500 ml. concentrated HCl, extracting the precipitate with CHCl3 and treating with SOCl2 as above. In alc. saturated with HCl at 10°. I (25 g.) left at room temperature for 2 days and cooled to 0° gave a precipitate, m. 159-61°, which could not be purified by repeated crystallization but on treatment with SOCl2 as above gave pure V. The structure of III was established as follows: infrared spectra and acetylation to IV show the presence of phenolic OH; pyrolysis of 25 g. III at 200° yielded 5 g. (CH2Cl)2; III in hot Me2CO with 1 mole alc. KOH in MeOH gave VI, m. 228-9° (CH2Cl)2, which on pyrolysis at 250° gave (CH2Cl)2 and VII, m. 239-40° (C6H6), which

sublimed at 250°. The other possible structure for VI would yield a polymer which would not sublime. This structure for III is supported by the double ring closure obtained on treatment of V using 2 moles KOH and Me2CO as above to give the same tricyclic compound, VI, as from III. The naphthalene chloroquinones differed from those in the C6H6 series. 2,3-Dichloro-1,4-naphthoquinone (VIII) (60 g.) treated as for II at 40° by dropping in HS(CH2)2OH and KOH at 40° and leaving overnight gave 12 g. 32,3-bis(β-hydroxyethylthio)-1,4-naphthoquinone (IX), m. 117-19° (MeOH), and considerable tar. But 80 ml. C5H5N added all at once to 100 g. VIII in 1600 ml. C6H6 and 72 ml. HS(CH2)2OH at exactly 54°, and the temperature kept at 65-7° for 15 min. gave 94 g. IX. IX (62 g.) in 620 ml. glacial Ac2O treated with 25 g. Zn dust at 25-30° yielded 39 g. of the corresponding naphthoquinol, m. 124-6°. Attempts to chlorinate IX to form the sulfur mustard with dry HCl in MeOH or AcOH, or with SOCl2 gave instead 1,4-oxathia-5,10-anthraquinone, black crystals, m. 231-3° (after sublimation at 200°/1 mm.), apparently by displacement of one of the HO(CH2)2S groups and cyclization.

IT **7704-34-9, Sulfur**
(compounds, heterocyclic)

L60 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1961:105820 HCAPLUS
DOCUMENT NUMBER: 55:105820
ORIGINAL REFERENCE NO.: 55:19907h-i,19908a-i
TITLE: Benzobisimidazoles
AUTHOR(S): Marxer, A.
CORPORATE SOURCE: C I B A Ltd., Basel, Switz.
SOURCE: Helvetica Chimica Acta (1961), 44, 762-70
CODEN: HCACAV; ISSN: 0018-019X
DOCUMENT TYPE: Journal
LANGUAGE: German
GI For diagram(s), see printed CA Issue.
AB For the two types of 2,6-dimethylbenzo[1,2:4,5]-bisimidazole-4,8-quinones[I (R = H) and I (R = Me)], the method of Efros (CA 47, 12366i) for the preparation of I (R = H) was unsuitable for the synthesis of N-substituted derivs., while the ring closure of Fries and Reitz (CA 31, 14062) proceeded in low yield and worked only with N-aryl compds. A new convenient synthesis was described for the II, which on oxidation were converted into the I. 3,6-Dichloro-3,5-bis(acetamido)benzoquinone (III) (43.6 g.) in 400 ml. EtOH treated dropwise at 50° with 55.6 g. Me(CH2)11NH2 and 40 g. Et3N in 200 ml. EtOH, and stirred 9 hrs. in a H2O bath at 80° (bath temperature) gave 65 g. OC.C(NHR):C(NHAc).CO.C(NHR):CNH Ac (IV) (R = dodecyl) (V), m. 162-5°. III (29.1 g.) in 250 ml. EtOH treated dropwise at 10° with 28.65 g. Et2N(CH2)3NH2 in 75 ml. and the mixture stirred 9 hrs. at room temperature gave 38 g. IV [R = (CH2)3NEt2] di-HCl salt, m. 260-2° (decomposition). Similarly were prepared the following IV (R and m.p. given): Me, above 318° [mixture with 13% 2,6-dichloro-3,6-bis(methylamino)benzoquinone (VI)]; Bu, 217-19°; CH2CH2OH, 241-3°; CH2CH2NEt2, - [di-HCl salt (VII) m. 205-7°]; CH2CH2N.CH2.CH2.O.CH2.CH2, 215-17°; (CH2)3NMe2, - (di-HCl salt m. 251-2°). IV (R = Me) (containing 13% VI) (14.01 g.) in 200 ml. EtOH hydrogenated with 10 g. Raney Ni, the solids filtered off, shaken with 100 ml. 2N HCl and 100 ml. H2O, the solution filtered, the filtrate treated with 50 ml. 6N HCl and 200 ml. absolute EtOH, and concentrated in vacuo to 200 ml. gave 12 g. II (R = Me) di-HCl salt (VIII), m. above 300° (aqueous HCl); treatment of an aqueous solution of VIII with 2N Na2CO3 gave II (R = Me), m. above 300°. Similarly were prepared II (R = Bu) di-HCl salt (IX), m. 313° (decomposition), and II (R = CH2CH2OH) di-HCl salt (X), m. 290° (decomposition). V (14.72 g.) in 250 ml. absolute EtOH shaken with 5 g. Raney Ni in an H atmospheric at 45-50°, the mixture treated with 200 ml. CHCl3, boiled, filtered, and the filtrate treated with 100 ml. 2.4N alc. HCl gave 14 g. II [R = (CH2)11Me] di-HCl salt, m.

298-301° (decomposition) (CHCl3-EtOH). VII (26.17 g.) in 250 ml. EtOH and 50 ml. H2O shaken with 15 g. Raney Ni under a slight pressure of H gave after treatment with 150 ml. 2.75N alc. HCl II (R = CH2CH2NEt2) tetra-HCl salt (XI), m. 308-10°; treatment of an aqueous solution of the salt with Na2CO3 gave the base, which was immediately oxidized to the corresponding quinone. VII (26.17 g.) reduced in 85% EtOH gave, after HCl treatment, 20 g. XI. Similarly were prepared the following II.4HCl (R and m.p. given): CH2CH2N.CH2.CH2.OCH2.CH2, 304-6° (decomposition); (CH2)3NMe2, 291-3° (decomposition); (CH2)3NEt2, 299-301° (decomposition); H, above 300°. IX (1 g.) in 15 ml. 40% H2SO4 treated with 1.5 g. CrO3, heated 2 min. at 110°, cooled, the precipitate (1 g. Cr complex) filtered off, dissolved in 50 ml. 2N H2SO4, the solution treated with 55 ml. 2N NaOH, the precipitate extracted with Et2O, the extract dried, and concentrated to 15 ml. gave I (R = Bu), m. 181-3°. X(10 g.) in 100 ml. H2O treated with a rapid stream of O, and after 2 hrs. the precipitate filtered off gave 4 g. I (R = CH2CH2OH) (XII), m. above 300°; the mother liquor treated with 100 ml. 2N NaOH and treated a short time with O gave an addnl. 4 g. XII, m. above 300°. Similarly were prepared I (R = CH2CH2NEt2) (XIII), m. 208-10° [di-HCl salt (XIV) m. 283-6°], and I (R = CH2CH2N.CH2.CH2.O.CH2.CH2), m. 241-3° (di-HCl salt m. 301-3°). III (29.1 g.) in 250 ml. EtOH treated dropwise with 25.3 g. Et3N and 25.6 g. Et2NCH2CH2NH2 in 75 ml. EtOH with cooling, stirred 9 hrs. at room temperature, the precipitate filtered off, the filtrate treated with 150 ml. 2.4N alc. HCl, kept overnight, the precipitate (23 g.) filtered off, washed, dissolved in 150 ml. H2O, and the solution treated with 150 ml. 2N NaOH gave 10 g. XIII, m. 208-10°; XIV m. 283-6° (decomposition). **Pharmacol.** investigations of the new I and II showed that when R was alkyl, the compds. had a sedative effect, while those compds. with basic substituents acted as hypertensive agents; in addition effects against protozoa, especially trypanosomes, were ascertained.

IT **7704-34-9, Sulfur**
(compds., heterocyclic, hydrolysis of)

L60 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1957:91151 HCAPLUS
DOCUMENT NUMBER: 51:91151
ORIGINAL REFERENCE NO.: 51:16579f-g,16580a-d
TITLE: 11-Oxygenated steroids
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 764320		19561228	GB	

AB Conversion of 14-unsubstituted 7,11-dioxo steroids to the 7-mono derivative and reduction produces 14-unsubstituted 11-oxo steroids useful as intermediate products for the manufacture of **therapeutically** active 11-oxo and 11-hydroxy steroids. Xa 1.3 in 24 parts HSCH2CH2SH saturated 1 hr. at 0° with dry HCl excess HCl removed in vacuo at room temperature, excess thiol removed by distillation, and the residue recrystd. from CHCl3-MeOH gave Xa 7-mono(ethylenedithio ketal) (Xb), m. 224-5°. Xb 0.1 in dioxane 5 added to a freshly prepared **suspension** of Raney alloy 5 in 20 parts dioxane, the mixture refluxed 3 hrs. and filtered, the filtrate evaporated in vacuo and the residue recrystd. from MeOH-H2O gave 3β-acetoxyergostan-11-one, m. 135-6°, [α]D20 32° (c 0.905, CHCl3). Use of less active Raney Ni gave 3β-acetoxyergost-22-en-11-one (Xc), m. 125-6°. Xa 1 treated 24 hrs. at room temperature with H2NNHCONH2.AcOH solution 100 (H2NNHCONH2.HCl 100 and KOAc 200 in MeOH 700), and the mixture filtered gave 0.9 parts Xa 7-monosemicarbazone (Xd),

m. 244-8° (decomposition). Xd, dried in high vacuum at 100°, heated 6 hrs. at 200° with NaOEt 100 (from Na 5 in 100 parts absolute alc.) in a sealed tube, the product extracted with Et2O and acetylated with Ac2O and pyridine yielded 0.7 parts Xc, also obtained by analogous treatment of the corresponding 7-monoxime. Xa 1.5 in HO(CH2)3OH solubilized by addition of MeOH and heating at 100°, the solution treated with N2H4.H2O 2 and heated 15 min. on a steam bath, the mixture treated with N2H4.H2O 1.6, NaOH 10, and H2O 20 and heated 3 hrs. at 180°, the mixture worked up and the product heated 30 min. on a steam bath with Ac2O 50 and pyridine 50, the mixture evaporated in vacuo, the product chromatographed on Al2O3, eluted with 9:1 and 8:2 petr. ether-C6H6, and the fractions crystallized from MeOH-H2O gave Xc, [α]D 12.5° (c 1.576, CHCl3). Similarly XI was converted to the crystalline 7-mono(ethylenedithio ketal) and reductively **desulfurized** in dioxane with Raney Ni to 3β,20-diacetoxyallopregnan-11-one. XIb reduced as above with N2H4.H2O in HO(CH2)3OH and the reduction product acetylated, gave after chromatography and recrystn. from MeOH-H2O, 3β-acetoxystigmast-22-en-11-one. XId was similarly reduced to 3β-hydroxycholestan-11-one, m. 152°. XIIa converted to the 7-mono(ethylenedithio ketal) was reduced and worked up to give Me 3-acetoxy-11-oxocholanate, m. 127-8° (from C6H14-C5H12), [α]D 68° (c 1.49, Me2CO). Similarly, XIc 7-mono(ethylenedithio ketal), m. 203-4°, [α]D -33° (CHCl3) was reductively **desulfurized** to 3β,17β-diacetoxy-androstan-11-one, m. 153-4°, [α]D 14° (CHCl3).

L60 ANSWER 24 OF 24 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1929:29871 HCAPLUS
DOCUMENT NUMBER: 23:29871
ORIGINAL REFERENCE NO.: 23:3539g-i
TITLE: Application of "critical solution temperature" to **pharmaceutical** investigations
AUTHOR(S): Wratschko, F.
SOURCE: Pharmazeutische Presse (1929), 34, 143-5
CODEN: PPWHAT; ISSN: 0370-1379
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB In connection with a discussion of the possible use of the "critical solution temperature" in the examination of **pharmaceutical** prepns., the following values were determined for the pairs: Et2N-H2O 18.6, butyric acid-H2O 24.3, CS2-MeOH 40.5, C6H14-MeOH 42.8, C2H4(CN)2-H2O 55.4, PhOH-H2O 68.8, AcCH2Ac-H2O 87.7, salicylic acid-H3O. 90.5, iso-BuOH-H2O 107, m-nitrobenzoic acid-H2O 107, resoremol-C6H6 108.9, EtCN-H2O 113.5, BzOH-H2O 115.5, PhCl-S 117, furfural-H2O 122.8, PhCNS-S 125.7, iso-BuOH-H2O 131.5, PhNH2-S 130.5, AcEt-H2O 150, C6H6-S 162.8, PhNH2-H2O 167, PhMe-s 179.5°.
IT **7704-34-9, Sulfur**
(critical solution temps. of, in PhCl, CH2:CHCH2CNS, PhNH2, C6H6 or PhMe)

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=> d stat que
L1 49 SEA FILE=REGISTRY ABB=ON PLU=ON DIKETONE?
L2 21774 SEA FILE=REGISTRY ABB=ON PLU=ON SULFUR/BI
L3 SEL PLU=ON L1 1- CHEM : 210 TERMS
L4 37613 SEA FILE=HCAPLUS ABB=ON PLU=ON L3
L5 54254 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 OR ?DIKETONE?
L6 589911 SEA FILE=HCAPLUS ABB=ON PLU=ON L2 OR ?SULFUR?
L7 1818 SEA FILE=HCAPLUS ABB=ON PLU=ON L6 AND L5
L9 28 SEA FILE=HCAPLUS ABB=ON PLU=ON L7 AND (?ANESTHE? OR ?HISTAMIN E? OR ?CORTICOST? OR ?IRRITANT? OR ?CREAM? OR ?LOTION? OR ?OINTMENT? OR URGENT? OR ?ITCH?)

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L10           18 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L9 NOT (FLAVOR? OR CREAM(W)BUT
                 TER OR FOOD#)
L13              STR

O=C-C=O
1  2  3  4

NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   4

STEREO ATTRIBUTES: NONE
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L17        12842 SEA FILE=REGISTRY SSS FUL L13 NOT L15
L18       117304 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L17
L20         1606 SEA FILE=REGISTRY ABB=ON  PLU=ON  COLLOID? OR SUSPENSION? OR
                 DISPERS?
L21      1941897 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L20 OR COLLOID? OR SUSPENSION?
                  OR DISPERS?
L22       140971 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L21(L)L6
L29         6235 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6 AND L18
L30          654 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L29 AND L22
L31       482726 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (?ANESTHE? OR ?HISTAMINE? OR
                 ?CORTICOST? OR ?IRRITANT? OR ?CREAM? OR ?LOTION? OR ?OINTMENT?
                 OR URGENT? OR ?ITCH?)
L32           20 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L31 AND L30
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L34           17 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L33 NOT (CREAM(W)BUTTER OR
                 FLAVOR? OR FOOD#)
L58       151635 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ?DIONE
L59          485 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L58 AND L22
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                 OR ?MEDICAL? OR ?DRUG? OR ?COSMET?)
L64          848 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L5(L)(?PHARM? OR ?THERAP? OR
                 ?MEDICAL? OR ?DRUG? OR ?COSMET?)
L65           29 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L64 AND L6
L66           28 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L65 NOT (L10 OR L34 OR L60)


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=> d ibib abs hitrn l66 1-28

L66  ANSWER 1 OF 28  HCAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         2004:42625  HCAPLUS
TITLE:                    Preparation of polymeric carrier for controlling the
                          drug release
INVENTOR(S):              Gao, Lin; Tan, Zhongwen; Tian, Hua; Xiang, Yingmei
PATENT ASSIGNEE(S):       Xinjiang Institute of Chemistry, Chinese Academy of
                          Sciences, Peop. Rep. China
SOURCE:                   Faming Zhuanli Shenqing Gongkai Shuomingshu, 11 pp.
                          CODEN: CNXXEV
DOCUMENT TYPE:            Patent
LANGUAGE:                 Chinese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.       KIND  DATE          APPLICATION NO.  DATE
```

CN 1363271	A	20020814	CN 2002-101964	20020119

PRIORITY APPLN. INFO.: CN 2002-101964 20020119

AB The carrier for controlling the delivery of **drug** is prepared by copolymn. of HOOC-C(R)=C(R')-COOH (R, R' = Me, Et, H, phenyl) with R1R2C=CR3R4 (R1, R2, R3, R4 = Me, Et, H, phenyl) in solvent in the presence of an initiator at 50-150°C and 0.1-0.6 MPa. The initiators used can be azodiisobutyronitrile, **dibenzoyl** peroxide, **sulfuric** acid, phosphoric acid, trichloroacetic acid, aluminum chloride, tri-Et aluminum, titanium tetrachloride, tin tetrachloride and titanium bromide; the solvents used can be water, benzene, glycerol, acetic acid, butane, pentane, hexane and liquid paraffin. The controlled-release formulation is prepared by encapsulating the **drug** in the carrier in proper solvent, adjusting pH to less than 6 with acids, separating, and drying. The acids used can be hydrochloride, **sulfuric** acid, phosphoric acid, acetic acid and oxalic acid. For example, a polymeric carrier for controlled release of **drugs** was prepared by copolymn. of 2,3-dimethylbutenedioic acid with tetramethylethylene under the initiator of azobisisobutyronitrile in hexane solution, which was then mixed with **drugs** to get **drug**-containing polymer matrix for controlling the **drug** release.

IT INDEXING IN PROGRESS

L66 ANSWER 2 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:777739 HCAPLUS
DOCUMENT NUMBER: 139:291991
TITLE: Preparation of 4-hydroxy-2-cyclopenten-1-ones and related compounds as P21Y1 receptor antagonists for the treatment of thromboembolic diseases
INVENTOR(S): Huebsch, Walter; Breuning, Matthias; Schmidt, Gunter; Albrecht, Barbara; Perzborn, Elisabeth; Faeste, Christiane; Baerfacker, Lars
PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Germany
SOURCE: PCT Int. Appl., 124 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

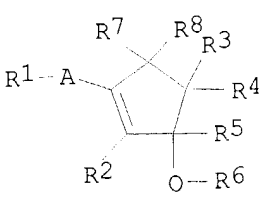
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003080553	A1	20031002	WO 2003-EP2532	20030312

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10213228	A1	20031016	DE 2002-10213228	20020325

PRIORITY APPLN. INFO.: DE 2002-10213228 A 20020325
OTHER SOURCE(S): MARPAT 139:291991
GI



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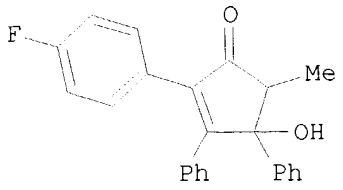


II

AB Title compds. I [R1 = (un)substituted alkylaryl, heteroaryl; A = alkylene, alkenylene, alkynylene; R2, R5 = pyridyl, thienyl, furyl, etc.; R3, R4 = H, alkyl, alkenyl, etc.; R6 = H, alkyl, alkoxy, etc.; R7 = H; R8 = OH] and their **pharmaceutically** acceptable salts and formulations were prepared For example, condensation of 1-(4-fluorophenyl)-2-butanone, e.g., prepared from 4-fluorophenylacetyl chloride and diethylzinc, and **benzil** afforded a diastereomeric mixture of hydroxycyclopentenone II. In P2Y1 receptor antagonist assays, 28-examples of compds. I exhibited IC50 values ranging from 0.002-0.3 μM, e.g., the IC50 value of the cis diastereomer of cyclopentenone II was 0.03 μM. Compds. I are claimed useful for the treatment of thromboembolic diseases.

IT **7719-09-7**, Thionyl chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of 4-hydroxy-2-cyclopenten-1-ones and related compds. as P2Y1 receptor antagonists for the treatment of thromboembolic diseases)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 3 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:576168 HCAPLUS
DOCUMENT NUMBER: 139:239085
TITLE: Hypoxia-Targeting Copper Bis(selenosemicarbazone) Complexes: Comparison with Their **Sulfur** Analogues
AUTHOR(S): Castle, Thomas C.; Maurer, Richard I.; Sowrey, Frank E.; Went, Michael J.; Reynolds, Christopher A.; McInnes, Eric J. L.; Blower, Philip J.
CORPORATE SOURCE: School of Physical Sciences, University of Kent, Canterbury, CT2 7NR, UK
SOURCE: Journal of the American Chemical Society (2003), 125(33), 10040-10049
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 139:239085

AB The 1st copper bis(selenosemicarbazone) complexes [Cu(L)] were synthesized, using the H2L ligands glyoxal bis(selenosemicarbazone), pyruvaldehyde bis(selenosemicarbazone), and **2,3-butanedione** bis(selenosemicarbazone). Their spectroscopic properties indicate that they are structurally analogous to their known square-planar **sulfur**-containing counterparts, the copper bis(thiosemicarbazone) complexes. Spectroscopic comparison of the **sulfur**- and selenium-containing complexes provides insight into their electronic structure. The effects on spectroscopic and redox properties of replacing **sulfur** with selenium, and of successive addition of Me groups to the ligand backbone, are rationalized in terms of their electronic structure using spin-unrestricted d. functional calcns. These suggest that, like the **sulfur** analogs, the complexes have a very low-lying empty ligand-based π-orbital immediately above the LUMO, while the LUMO itself has dx2-y2 character (i.e., is the spin partner of

the HOMO). Replacement of S by Se shifts the oxidation potentials much more than the reduction potentials, whereas alkylation of the ligand backbone shifts the reduction potentials more than the oxidation potentials. Probably oxidation and reduction involve spatially different orbitals, with the addnl. electron in the reduced species occupying the ligand-based π-orbital rather than dx2-y2. D. functional calcns. on the putative singlet Cu(I)-reduced species suggest that this ligand π-character could be brought about by distortion away from planarity during reduction, allowing the low-lying ligand π-LUMO to mix into the dx2-y2-based HOMO. The analogy in the structure and reduction behavior between the **sulfur**- and selenium-containing complexes suggests that labeled with positron emitting isotopes of copper (Cu-60, Cu-62, Cu-64), the complexes warrant biol. evaluation as **radiopharmaceuticals** for imaging of tissue perfusion and hypoxia.

REFERENCE COUNT: 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 4 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:371661 HCAPLUS
DOCUMENT NUMBER: 138:390526
TITLE: Odor masking compositions containing fragrant substances for hair cosmetics
INVENTOR(S): Kawasaki, Kiyomitsu
PATENT ASSIGNEE(S): Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 81 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003137758	A2	20030514	JP 2001-330894	20011029

PRIORITY APPLN. INFO.: JP 2001-330894 20011029

AB The compns., useful for permanent wave agents, hair dyes, etc., contain ≥1 fragrances chosen from hydrocarbons, alcs., phenols, aldehydes and/or acetals, ketones and/or ketals, ethers, synthetic musks, acids, lactones, esters, N-, S-, and/or halogen-containing compds., and natural fragrances. A fragrance composition was prepared from 1,3,5-undecatriene 10, 10-undecenol 10, 1-octen-3-ol 10, 10-undecenal 10, 2,4-decadienal 10, 1,8-cineole 10, phenylacetic acid (1%) 10, 1-ethynylcyclohexyl acetate 10, 1-octen-3-yl acetate 5, 2-ethylhexyl acetate 10, and Abies fir oil 5 weight parts.

IT **123-42-2, Diacetone alcohol 137-00-8**
, 4-Methyl-5-thiazoleethanol **431-03-8, Diacetyl**
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(odor masking compns. containing fragrant substances for hair **cosmetics**)

L66 ANSWER 5 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:334531 HCAPLUS
DOCUMENT NUMBER: 138:334060
TITLE: Detection of glucose in solutions also containing an alpha-hydroxy acid or a beta-diketone
INVENTOR(S): Daniloff, George Y.; Kalivretenos, Aristotle G.; Nikolaitchik, Alexandre V.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 49 pp., Cont.-in-part of U.S. Ser. No. 29,184.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003082663	A1	20030501	US 2002-187903	20020703
US 2002090734	A1	20020711	US 2001-754217	20010105
US 2002127626	A1	20020912	US 2001-29184	20011228
WO 2003078424	A1	20030925	WO 2003-US7938	20030314

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 2001-754217	A2	20010105
US 2001-269887P	P	20010221
US 2001-329746P	P	20011018
US 2001-29184	A2	20011228
US 2002-363885P	P	20020314
US 2002-187903	A	20020703

AB Compns. and methods for determining the presence or concentration of glucose in a sample which may also contain an alpha-hydroxy acid or a beta-diketone. The method uses a compound having at least two recognition elements for glucose, oriented such that the interaction between the compound and glucose is more stable than the interaction between the compound and the alpha-hydroxy acid or beta-diketone, such that the presence of the alpha-hydroxy acid or the beta-diketone does not substantially interfere with said determination

IT **7704-34-9D, Sulfur,** compds. containing
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (detection of glucose in solns. also containing alpha-hydroxy acid or a beta-diketone)

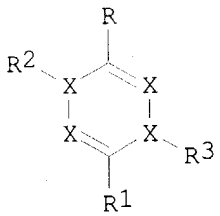
L66 ANSWER 6 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:574870 HCAPLUS
DOCUMENT NUMBER: 137:140538
TITLE: Novel cannabimimetic ligands, particularly 1,2,4,5-tetrazine derivatives and analogs, and their preparation and pharmaceutical use as selective CB2 ligands
INVENTOR(S): Makriyannis, Alexandros; Deng, Hongfeng
PATENT ASSIGNEE(S): University of Connecticut, USA
SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002058636	A2	20020801	WO 2002-US2157	20020125
WO 2002058636	A3	20021010		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,

SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
EP 1361876 A2 20031119 EP 2002-707564 20020125
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
US 2004077649 A1 20040422 US 2003-466403 20031031
PRIORITY APPLN. INFO.: US 2001-264385P P 20010126
WO 2002-US2157 W 20020125

OTHER SOURCE(S): MARPAT 137:140538
GI



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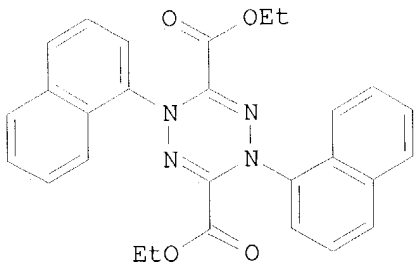


II

AB Disclosed are heterocyclic compds. and methods for their manufacture In particular, the compds. disclosed are represented by structure I [each X = (independently) CH or N; R = alkoxy, alkyl, haloalkoxy, alkylketo, alkylthioketo, CO2H, CONR6R7, ester, thioester, reversed ester, reversed thioester, reversed amide, or COR4; R1 = same groups, except COR5 instead of COR4; R2, R3 = (un)substituted Ph, CH2Ph, α/β-naphthyl, CH2-α/β-naphthyl, certain N/O/S-heteroaryl or CH2-N/O/S-heteroaryl, terpenes, etc.; R4, R5 = methoxy, ethoxy, propoxy, Me, amino, methylamino, ethylamino, ethylamino, butylamino, piperidino, (R)-2-hydroxy-1-methylethylamino or enantiomer, (+)-isopinocampheylamino or enantiomer; R6, R7 = H, alkyl, or carbalkoxyalkyl; including physiol. acceptable salts, diastereomers, enantiomers, double-bond isomers, and/or mixts.]. Also disclosed are methods of using the disclosed compds., including use of the disclosed compds. to stimulate a cannabinoid receptor, to provide a physiol. effect in an animal or individual and to treat a condition in an animal or individual. Compds. I are surprisingly potent and selective cannabinoids. A table of 25 specific compds. is given, and the same compds. are covered individually by claims. A preparatory scheme is also covered by claims. For instance, reaction of 1-naphthalenediazonium **sulfuric** acid salt with Et 2-chloroacetoacetate gave 1-C10H7-NHN:C(Cl)CO2Et. This ester was cyclodimerized by NaN(SiMe3)2 in THF at -78°, giving the invention tetrazine II. A representative compound I inhibited adenylate cyclase in an intracellular cAMP bioassay, indicating CB2 agonist activity. In binding studies using rat brain CB1 receptors and mouse spleen CB2 receptors, I generally showed selectivity for CB2 receptors, with II showing the highest selectivity (524-fold for CB2 over CB1).

L66 ANSWER 7 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:555763 HCAPLUS
DOCUMENT NUMBER: 137:106086
TITLE: Detection of glucose in solutions also containing an alpha-hydroxy acid or a beta-diketone
INVENTOR(S): Daniloff, George Y.; Kalivrentenos, Aristotle G.; Nikolaitchik, Alexandre V.
PATENT ASSIGNEE(S): Sensors for Medicine and Science, Inc., USA

SOURCE: PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002057788	A2	20020725	WO 2002-US199	20020104
WO 2002057788	A3	20031127		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2002090734	A1	20020711	US 2001-754217	20010105
US 2002127626	A1	20020912	US 2001-29184	20011228
EP 1388014	A2	20040211	EP 2002-713356	20020104
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRIORITY APPLN. INFO.:
US 2001-754217 A 20010105
US 2001-269887P P 20010221
US 2001-329746P P 20011018
US 2001-29184 A 20011228
WO 2002-US199 W 20020104

OTHER SOURCE(S): MARPAT 137:106086

AB The invention concerns compns. and methods for determining the presence or concentration of glucose in a sample which may also contain an alpha-hydroxy acid or a beta-diketone. The method uses a compound having at least two recognition elements for glucose, oriented such that the interaction between the compound and glucose is more stable than the interaction between the compound and the alpha-hydroxy acid or beta-diketone, such that the presence of the alpha-hydroxy acid or the beta-diketone does not substantially interfere with said determination

IT **7704-34-9D, Sulfur**, derivs.
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (detection of glucose in solns. also containing alpha-hydroxy acid or a beta-diketone)

L66 ANSWER 8 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:522549 HCAPLUS
DOCUMENT NUMBER: 137:90594
TITLE: Detection of glucose in solutions also containing an alpha-hydroxy acid or a beta-diketone
INVENTOR(S): Daniloff, George Y.; Kalivretenos, Aristotle G.; Nikolaitchik, Alexandre V.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 21 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002090734	A1	20020711	US 2001-754217	20010105
US 2002127626	A1	20020912	US 2001-29184	20011228

WO 2002057788 A2 20020725 WO 2002-US199 20020104
WO 2002057788 A3 20031127
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
EP 1388014 A2 20040211 EP 2002-713356 20020104
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
US 2003082663 A1 20030501 US 2002-187903 20020703
PRIORITY APPLN. INFO.: US 2001-754217 A2 20010105
US 2001-269887P P 20010221
US 2001-329746P P 20011018
US 2001-29184 A 20011228
WO 2002-US199 W 20020104
US 2002-363885P P 20020314

OTHER SOURCE(S): MARPAT 137:90594

AB Compns. and methods for determining the presence or concentration of glucose in a sample which may also contain an alpha-hydroxy acid or a beta-diketone. The method uses a compound having at least two recognition elements for glucose, oriented such that the interaction between the compound and glucose is more stable than the interaction between the compound and the alpha-hydroxy acid or beta-diketone, such that the presence of the alpha-hydroxy acid or the beta-diketone does not substantially interfere with said determination

IT **7704-34-9D, Sulfur,** compds. containing
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (detection of glucose in solns. also containing alpha-hydroxy acid or a beta-diketone)

L66 ANSWER 9 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:468985 HCAPLUS
DOCUMENT NUMBER: 138:32826
TITLE: S-methyldithiocarbazate and its Schiff bases: evaluation of bondings and biological properties
AUTHOR(S): Tarafder, Md. Tofazzal Hossain; Kasbollah, Azahari; Saravanan, N.; Crouse, Karen A.; Ali, Abdul M.; Oo, Khor Tin
CORPORATE SOURCE: Department of Chemistry, Universiti Putra Malaysia, Serdang, 43400, Malay.
SOURCE: Journal of Biochemistry, Molecular Biology and Biophysics (2002), 6(2), 85-91
CODEN: JBMBF6; ISSN: 1025-8140
PUBLISHER: Taylor & Francis Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Eight selective nitrogen-**sulfur** donor ligands have been synthesized from the condensation of S-methyldithiocarbazate (SMDTC) with aldehydes and ketones with a view to evaluating their antimicrobial and cytotoxic activities, and also to correlate the biol. properties with the structure of the ligands. The compds. were all characterized by elemental analyses and other physicochem. techniques. SMDTC and the Schiff bases were screened for antimicrobial and cytotoxic activities. SMDTC showed very large inhibition zones (24-44 mm) against bacteria and fungi with a min. inhibitory concentration (MIC) of 390-25,000 and 1562-6250 μg ml-1, against different bacteria and fungi, resp. Streptomycin and nystatin were used as the internal stds. against bacteria and fungi, resp. SMDTC along with its Schiff bases with pyridine-2-carboxaldehyde, acetylacetone

and **2,3-butanedione** were strongly antifungal and the MIC values were comparable to nystatin. Most of the Schiff bases were strongly cytotoxic. In particular, those with pyridine-2-carboxaldehyde and **2,3-butanedione** have CD50 values of 5.5, 1.9-2.0 μg ml-1, resp., against leukemic cells, while against colon cancer cells, the values were 3.7 and 2.0 μg ml-1, resp. The glyoxal Schiff base was strongly active only against leukemic cell with CD50 value of 4.0 μg ml-1. The present findings have been compared with standard **drugs**.

IT **134-81-6, Benzil 431-03-8, 2, 3-Butanedione**
RL: RCT (Reactant); RACT (Reactant or reagent)
(S-methyldithiocarbazate and its Schiff bases and **pharmacol.** activity)

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 10 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:408477 HCAPLUS
DOCUMENT NUMBER: 136:400977
TITLE: Stabilization method and composition utilizing an amphoteric polymer
INVENTOR(S): Yang, Robert K.
PATENT ASSIGNEE(S): Conagra Foods, Inc., USA
SOURCE: PCT Int. Appl., 18 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002041838	A2	20020530	WO 2001-US44417	20011127
WO 2002041838	A3	20020829		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002035145	A5	20020603	AU 2002-35145	20011127
US 2002115729	A1	20020822	US 2001-995326	20011127

PRIORITY APPLN. INFO.:
US 2000-253598P P 20001127
US 2000-253599P P 20001127
WO 2001-US44417 W 20011127

AB A method for increasing the stability of a food-grade or pharmaceutical-grade liquid, such as an extracted oil, herbal extract, flavor, color, or volatile chemical component used in the flavor industry, is provided. The method comprises mixing the liquid with an amphoteric polymer, preferably polyvinylpyrrolidone, to thereby infuse the liquid into the amphoteric polymer matrix and form a generally-solid, stabilized product. Optionally, bulking agents, absorbents, and flowing agents can be mixed with the liquid and amphoteric polymer to enhance the properties of the stabilized product. The inventive method is particularly useful for entrapping liqs. that are highly volatile, heat sensitive and/or easily oxidizable. For example, oleoresin capsicum was stabilized by mixing (by weight) oleoresin capsicum 25%, Tween 60 emulsifier 30%, polyvinylpyrrolidone 20%, starch 7.5%, and calcium silicate absorbent 17.5%.

IT **431-03-8, Diacetyl 51621-86-4,**

Sulfurane
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amphoteric polymers for stabilization of food- and **pharmaceutical**-grade liqs.)

L66 ANSWER 11 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:885834 HCAPLUS
DOCUMENT NUMBER: 136:25104
TITLE: Peptide-containing compounds for targeting endothelial cells, compositions containing the same and methods for their use
INVENTOR(S): Von Wronski, Mathew A.; Marinelli, Edmund R.; Nunn, Adrian D.; Pillai, Radhakrishna; Ramalingam, Kondareddiar; Tweedle, Michael F.; Linder, Karen; Nanjappan, Palaniappa; Raju, Natarajan
PATENT ASSIGNEE(S): Bracco Research USA, USA
SOURCE: PCT Int. Appl., 146 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001091805	A2	20011206	WO 2001-US18053	20010604
WO 2001091805	A3	20020906		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1289565	A2	20030312	EP 2001-944270	20010604
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004500854	T2	20040115	JP 2001-587817	20010604

PRIORITY APPLN. INFO.: US 2000-585364 A2 20000602
WO 2001-US18053 W 20010604

OTHER SOURCE(S): MARPAT 136:25104

AB The present invention provides compds. for targeting endothelial cells, tumor cells or other cells that express the neuropilin-1 (NP-1) receptor, compns. containing the same and methods for their use. The compds. are of the formula A-L-B (A = TKPPR or analog which specifically binds to an endothelial cell or cells that express markers in common with endothelial cells, with equal or greater avidity as TKPPR; L = a lipid or a non-lipid (polymer) linker; B = a substrate). Addnl., the present invention includes diagnostic, therapeutic and radiotherapeutic compns. useful for visualization, therapy or radiotherapy. For example, DPPE-glutaroyl-Gly-Thr-Lys-Pro-Pro-Arg-OH (DPPE-Glu-GTKPPR) was prepared and formulated into gas-filled microbubble compns. for ultrasonic echog. The bubbles interact with a VEGF receptor on human aortic endothelial cells (HAEC), possibly with KDR receptor, or more likely with NP-1 receptor which binds to KDR.

IT **2551-62-4**, **Sulfur** hexafluoride
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of peptide-containing compds. and compns. for targeting endothelial cells expressing neuropilin-1 receptor for diagnosis and **therapy**)

L66 ANSWER 12 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:565913 HCAPLUS
DOCUMENT NUMBER: 135:107342
TITLE: Preparation of tetramethylpyrazine ferulate as platelet aggregation inhibitor and antithrombotic
INVENTOR(S): Tan, Zaiyou
PATENT ASSIGNEE(S): Inst. of Medicament, Guangdong Medicine College, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 7 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

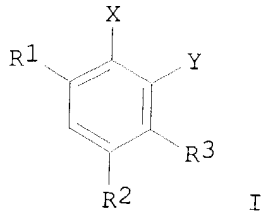
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1274722	A	20001129	CN 2000-114239	20000430

PRIORITY APPLN. INFO.: CN 2000-114239 20000430
OTHER SOURCE(S): CASREACT 135:107342
AB Tetramethylpyrazine ferulate is synthesized by condensing vanillin with malonic acid in pyridine under refluxing for 1 h, decomposing with HCl in ice-water, recrystg. to obtain ferulic acid; esterifying ethanol with NaNO2 solution in the presence of H2SO4 to obtain Et nitrite, condensing with butanone at 40-55° to obtain **diacetyl** monoxime, cyclizing with NH4Cl in the presence of acetic acid and Zn at 85° for 30 min, neutralizing to ph 7-8, distilling to obtain tetramethylpyrazine, and salifying with ferulic acid in acetone under refluxing. The synthetic tetramethylpyrazine ferulate is used as platelet aggregation inhibitors, antithrombotics, and antimigraine **drugs**, etc.

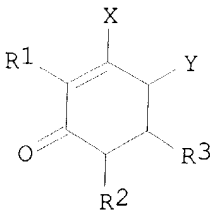
L66 ANSWER 13 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:152647 HCAPLUS
DOCUMENT NUMBER: 134:178470
TITLE: Benzene derivatives substituted by aromatic ring and process for producing the same
INVENTOR(S): Toya, Tetsuya
PATENT ASSIGNEE(S): Nippon Kayaku Kabushiki Kaisha, Japan
SOURCE: PCT Int. Appl., 148 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001014336	A1	20010301	WO 2000-JP5531	20000818
W: CA, CN, IN, KR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 2001131121	A2	20010515	JP 2000-240642	20000809
JP 2001131114	A2	20010515	JP 2000-240757	20000809
JP 2001240590	A2	20010904	JP 2000-388349	20001221

PRIORITY APPLN. INFO.: JP 1999-234555 A 19990820
JP 1999-234668 A 19990820
JP 1999-364620 A 19991222
OTHER SOURCE(S): CASREACT 134:178470; MARPAT 134:178470
GI



I



II

AB Benzene derivs. substituted by an aromatic ring which are represented by general formula (I; X represents an optionally substituted benzene ring, optionally substituted naphthalene ring, optionally substituted five- or six-membered heterocycle having at least one of nitrogen, oxygen, and **sulfur**, or optionally substituted condensate of any of these with benzene; Y represents CO2R6, cyano, NO2, SO3R6, SO2NR4R5, SO2R6, or SO2R6; R1, R2, and R3 are optionally substituted C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, C1-6 alkoxy, or alkylthio, NR4R5, halo, NO2, cyano, COR6, CO2R6, CONR4R5, SO3R6, SO2NR4R5, etc.; R4, R5, and R6 each represents hydrogen, optionally substituted C1-6 alkyl or Ph, or R4 and R5 may form a 4- to 7-membered ring) are prepared via Michael addition reaction of ketones represented by formula XCOCH2Y (X and Y are defined as above) with α,β-unsatd. ketones represented by formula R1CH2COC(R2):CHR3 (R1, R2, and R3 are defined as above) and cyclization of the resulting hexanediones represented by formula R1CH2COCHR2CHR3CHYCOX (X, Y, R1, R3, and R3 are defined as above) to cyclohexenone derivs. (II; X, Y, R1, R3, and R3 are defined as above). This process gives (hetero)aryl-substituted benzenes I in high yield from an inexpensive material under mild reaction conditions. I are useful as intermediates for **drugs** such as angiotensin II receptor antagonists, factor Xa inhibitors, and protease inhibitors, and those for agrochems., liquid crystals, heat-resistant polymers, and liquid crystal polymers. Thus, 35 mg EtONa was added to a solution of 1.0 g Et isonicotinoylacetate in 5 mL EtOH, followed by slowly adding dropwise 400 mg Me vinyl ketone, and the resulting mixture was stirred overnight to give 71.8% 2-isonicotinoyl-5-oxohexanoic acid Et ester. The latter **diketone** ester (978 mg) was dissolved in 20 mL PhMe, treated with 137 mg AcOH and 311 mg piperidine, and refluxed with removing water to give 2-(4-pyridyl)-4-oxocyclohex-2-ene-1-carboxylic acid Et ester which (523 mg) was reduced by 81.0 mg NaBH4 in 5 mL MeOH at 0° for 1 h to give 68.4% 4-hydroxy-2-(4-pyridyl)cyclohex-2-ene-1-carboxylic acid Et ester. The latter compound (360 mg) was dissolved in 3 mL CH2Cl2 and 3 mL PhMe, treated with 0.265 mL SOCl2 under ice-cooling, and stirred at room temperature for 1 h to give 4-chloro-2-(4-pyridyl)cyclohex-2-ene-1-carboxylic acid Et ester which (390 mg) was dissolved in 5 mL tert-butanol, treated with 246 mg t-BuOK under water-cooling, and stirred at room temperature for 1 h to give 63.5% 2-(4-pyridyl)cyclohexa-1,3-diene-1-carboxylic Et ester. This compound (100 mg) was dissolved in 1.5 mL AcOH and 1.5 mL H2O, treated with 30 mg 5% Pd-C, and refluxed for 2 h to give a .apprx.2:1 mixture of 2-(4-pyridyl)benzoic acid Et ester and 2-(4-pyridyl)cyclohex-2-ene-1-carboxylic acid Et ester in 87.2% yield. .

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 14 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:796856 HCAPLUS
TITLE: Recent advances in Coenzyme A analog synthesis.
AUTHOR(S): Mishra, Pranab; Drueckhammer, Dale G.
CORPORATE SOURCE: Department of Chemistry, State University of New York, Stony Brook, NY, 11794-3400, USA
SOURCE: Abstracts of Papers - American Chemical Society (2000), 220th, ORGN-353

CODEN: ACSRAL; ISSN: 0065-7727
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal; Meeting Abstract
LANGUAGE: English

AB CoA is an essential cofactor in many biosynthetic, degradative, and energy yielding metabolic pathways. The discovery of highly selective, potent and orally active inhibitors of Coenzyme-A utilizing enzymes has been a focus in the **pharmaceutical** community over the past few years. Improvements in the enzymic methodol. for the synthesis of analogs of CoA will be presented. The larger scale synthesis of analogs will also be presented. This work employs recombinant enzymes, including the dephosphoCoA kinase that has been recently cloned and expressed in this laboratory Also presented will be the synthesis of specific new analogs. These include a **diketone** analog of acetyl-CoA, in which the thioester **sulfur** atom is replaced with a carbonyl group and a deoxy analog, in which the hydroxyl group of the pantoate moiety is replaced with hydrogen. Thus recent advances in CoA Analog Synthesis will be discussed.

L66 ANSWER 15 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:755211 HCAPLUS
DOCUMENT NUMBER: 133:340208
TITLE: Novel compositions useful for delivering anti-inflammatory agents into a cell
INVENTOR(S): Unger, Evan C.; McCreery, Thomas; Sadewasser, David A.
PATENT ASSIGNEE(S): ImaRx Pharmaceutical Corp., USA
SOURCE: Eur. Pat. Appl., 78 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1046394	A2	20001025	EP 2000-303249	20000418
EP 1046394	A3	20011010		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.: US 1999-294623 A 19990419

AB The present invention is directed, inter alia, to compns. and their use for delivering compds. into a cell. In a preferred embodiment, the compns. comprise, in combination with the compound to be delivered, an organic halide, a targeting ligand, and a nuclear localization sequence, optionally in the presence of a carrier. Ultrasound may be applied, if desired. The compns. are particularly suitable for the treatment of inflammatory diseases.

IT **2551-62-4, Sulfur** hexafluoride
RL: RCT (Reactant); RACT (Reactant or reagent)
(peptide compns. useful for delivering anti-inflammatory agents into a cell)

L66 ANSWER 16 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:332298 HCAPLUS
TITLE: Solution- and solid-phase synthesis of flavones to be tested as drugs for cystic fibrosis.
AUTHOR(S): Springsteel, Mark F.; Niedzinski, Edmund J.; Nantz, Michael H.; Kurth, Mark J.
CORPORATE SOURCE: Chemistry/Nantz & Kurth, U of CA, Davis, CA, 95616, USA
SOURCE: Book of Abstracts, 219th ACS National Meeting, San Francisco, CA, March 26-30, 2000 (2000), ORGN-173. American Chemical Society: Washington, D. C.
CODEN: 69CLAC

DOCUMENT TYPE: Conference; Meeting Abstract
LANGUAGE: English

AB Cystic fibrosis is an autosomal recessive genetic disease that results in defective chloride channeling proteins. The abnormal chloride flux effects the exocrine glands, liver, lungs and other organs. Recently it has been reported that flavones stimulate chloride conductance of human airway epithelium in vivo. This report suggests flavone derivs. are an attractive structural lead in the search for new **drugs** to treat cystic fibrosis. Flavones and azaflavones have been made in solution (25-40% overall yield) and are currently being optimized on the solid phase. The solid phase work for the flavones involves a Mitsunobu coupling of 2-hydroxyacetophenone derivs. to Wang resin, followed by formation of the acetophenone enolate and acylation with benzoylchloride derivs. Finally the 1,3-**diketone** intermediate is cleaved, cyclized and eliminated in glacial acetic acid with concentrated **sulfuric** acid. Details of these reactions will be presented.

L66 ANSWER 17 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:223989 HCAPLUS
DOCUMENT NUMBER: 130:338081
TITLE: Synthesis of thiophenecarboxamides, thieno[3,4-c]pyridin-4(5H)-ones and thieno[3,4-d]pyrimidin-4(3H)-ones and preliminary evaluation as inhibitors of poly(ADP-ribose)polymerase (PARP)
AUTHOR(S): Shinkwin, Anne E.; Whish, William J. D.; Threadgill, Michael D.
CORPORATE SOURCE: Department of Pharmacy and Pharmacology, University of Bath, Bath, BA2 7AY, UK
SOURCE: Bioorganic & Medicinal Chemistry (1999), 7(2), 297-308 CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Inhibitors of poly(ADP-ribose)polymerase (PARP) inhibit repair of damaged DNA and thus potentiate **radiotherapy** and **chemotherapy** of cancer. Treatment of 3-cyanothiophene with potassium nitrate and concentrated **sulfuric** acid gave 5-nitrothiophene-3-carboxamide. 4-Nitrothiophene-2-carboxamide and 5-nitrothiophene-2-carboxamide were formed similarly from 2-cyanothiophene. Reduction with tin(II) chloride gave the corresponding aminothiophenecarboxamide salts which were isolated via their N-Cbz derivs. Lithiation of 3,4-dibromothiophene at -116°C and quenching with alkyl chloroformates gave 4-bromothiophene-3-carboxylates, which were hydrolyzed to 4-bromothiophene-3-carboxylic acid. Hurtley reactions with the enolates of 2,4-pentanedione and of 1-phenyl-1,3-**butanedione**, followed by acyl cleavage, led to 4-(2-oxopropyl)thiophene-3-carboxylic acid and 4-phenacylthiophene-3-carboxylic acid, resp. Condensation with ammonia in acetic acid gave 6-methyl- and 6-phenyl-thieno[3,4-c]pyridin-4-ones, which were selectively nitrated at the 1- and 7-positions or were dinitrated. Et 4-acetamido- and 4-benzamido-thiophene-3-carboxylates were cyclized to 2-methyl- and 2-phenyl-thieno[3,4-d][1,3]oxazin-4-ones, resp. Ring-opening with ammonia and recyclization led to 2-substituted thieno[3,4-d]pyrimidin-4-ones. The aminothiophenecarboxamides are analogs of 3-aminobenzamide, a selective inhibitor of poly(ADP-ribose)polymerase (PARP); the thienopyridinones and the thienopyrimidinones are analogs of isoquinolin-1-ones and quinazolin-4-ones, resp., which inhibit this enzyme. In preliminary assays, several thienopyridinones and thienopyrimidinones showed potent inhibitory activity against PARP.

REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 18 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:766508 HCAPLUS
DOCUMENT NUMBER: 130:29222
TITLE: Acoustically active drug delivery systems comprising a gas or gaseous precursor filled microsphere
INVENTOR(S): Unger, Evan C.
PATENT ASSIGNEE(S): ImaRx Pharmaceutical Corp., USA
SOURCE: PCT Int. Appl., 156 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9851284	A1	19981119	WO 1998-US9569	19980512
W: AU, BR, CA, CN, JP, KR, NZ				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6416740	B1	20020709	US 1998-75343	19980511
AU 9877961	A1	19981208	AU 1998-77961	19980512
EP 981333	A1	20000301	EP 1998-926033	19980512
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001524983	T2	20011204	JP 1998-549372	19980512
US 2002159952	A1	20021031	US 2002-84855	20020227
US 2004091541	A1	20040513	US 2003-622027	20030716

PRIORITY APPLN. INFO.:
US 1997-46379P P 19970513
US 1998-75343 A 19980511
US 1998-75477 B3 19980511
WO 1998-US9569 W 19980512
US 2001-828762 B1 20010409

AB The present invention is directed to targeted therapeutic delivery systems comprising a gas or gaseous precursor filled microsphere wherein said gas or gaseous precursor filled microsphere comprises an oil, a surfactant, and a therapeutic compound Methods of preparing the targeted therapeutic delivery systems are also embodied by the present invention which comprise processing a solution comprising an oil and a surfactant in the presence of a gaseous precursor, at a temperature below the gel to liquid crystalline phase transition temperature of the surfactant to form gas or gaseous precursor filled microsphere, and adding to said microspheres a therapeutic compound resulting in a targeted therapeutic delivery system, wherein said processing is selected from the group consisting of controlled agitation, controlled drying, and a combination thereof. Thus, 1.5 mL of MRX115 precursor was mixed with 320 μL soybean oil followed by addition of dipalmitoyl phosphoethanolamine to the soybean oil at a concentration of 0.5 mg/mL. The mixture was placed into a vial and the headspace removed and replaced with perfluorobutane and was shaken for 60 s. The acoustically active lipospheres thus obtained had particle size of 1.67-3.49 μm.

IT **373-80-8 421-83-0**, Methanesulfonylchloride-trifluoro
2551-62-4, **Sulfur** hexafluoride **5714-22-7**,
Sulfur fluoride (S2F10)
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(acoustically active **drug** delivery systems comprising gas or gaseous precursor filled microsphere)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L66 ANSWER 19 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1997:85497 HCAPLUS
DOCUMENT NUMBER: 126:135617
TITLE: Method of preparing gas and gaseous precursor-filled microspheres

INVENTOR(S): Unger, Evan C.; Fritz, Thomas A.; Matsunaga, Terry; Ramaswami, Varadarajan; Yellowhair, David; Wu, Guanli
PATENT ASSIGNEE(S): ImaRx Pharmaceutical Corp., USA
SOURCE: U.S., 42 pp., Cont.-in-part of U.S. Ser. No. 160,232, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 21
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5585112	A	19961217	US 1993-159687	19931130
US 5088499	A	19920218	US 1990-569828	19900820
WO 9109629	A1	19910711	WO 1990-US7500	19901219
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
AT 180170	E	19990615	AT 1991-902857	19901219
ES 2131051	T3	19990716	ES 1991-902857	19901219
JP 3309356	B2	20020729	JP 1991-503276	19901219
JP 05502675	T2	19930513		
US 5228446	A	19930720	US 1991-717084	19910618
WO 9222247	A1	19921223	WO 1992-US2615	19920331
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
AU 9220020	A1	19930112	AU 1992-20020	19920331
AU 667471	B2	19960328		
JP 06508364	T2	19940922	JP 1993-500847	19920331
JP 3456584	B2	20031014		
EP 616508	A1	19940928	EP 1992-912456	19920331
EP 616508	B1	20010718		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
AT 203148	E	20010815	AT 1992-912456	19920331
ES 2159280	T3	20011001	ES 1992-912456	19920331
US 5469854	A	19951128	US 1993-76239	19930611
US 5348016	A	19940920	US 1993-88268	19930707
US 5542935	A	19960806	US 1993-160232	19931130
US 5769080	A	19980623	US 1994-199462	19940222
CA 2164846	AA	19941222	CA 1994-2164846	19940519
WO 9428874	A1	19941222	WO 1994-US5633	19940519
W: AU, CA, CN, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9469537	A1	19950103	AU 1994-69537	19940519
AU 696056	B2	19980827		
JP 08511523	T2	19961203	JP 1995-501811	19940519
EP 802788	A1	19971029	EP 1994-918051	19940519
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
CA 2164845	AA	19941222	CA 1994-2164845	19940520
WO 9428780	A2	19941222	WO 1994-US5792	19940520
WO 9428780	A3	19950202		
W: AU, CA, CN, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9470431	A1	19950103	AU 1994-70431	19940520
AU 683900	B2	19971127		
EP 712293	A1	19960522	EP 1994-919208	19940520
EP 712293	B1	20030305		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 08511526	T2	19961203	JP 1995-501839	19940520
EP 1252885	A2	20021030	EP 2002-78168	19940520
EP 1252885	A3	20030416		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
AT 233574	E	20030315	AT 1994-919208	19940520

PT 712293	T	20030731	PT 1994-919208	19940520
ES 2193161	T3	20031101	ES 1994-919208	19940520
US 5773024	A	19980630	US 1994-307305	19940916
US 5733572	A	19980331	US 1994-346426	19941129
CA 2177713	AA	19950608	CA 1994-2177713	19941130
WO 9515118	A1	19950608	WO 1994-US13817	19941130
W: AU, CA, CN, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 740528	A1	19961106	EP 1995-908414	19941130
EP 740528	B1	20030326		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 09506098	T2	19970617	JP 1995-515763	19941130
AT 235228	E	20030415	AT 1995-908414	19941130
US 5922304	A	19990713	US 1995-401974	19950309
US 5705187	A	19980106	US 1995-417238	19950405
US 5571497	A	19961105	US 1995-468056	19950606
US 5853752	A	19981229	US 1995-487230	19950606
US 5656211	A	19970812	US 1995-482294	19950607
US 6443898	B1	20020903	US 1995-485998	19950607
CN 1180310	A	19980429	CN 1996-193069	19960327
CN 1102045	B	20030226		
US 5776429	A	19980707	US 1996-643070	19960430
US 6001335	A	19991214	US 1996-665719	19960618
US 6146657	A	20001114	US 1996-741598	19961101
US 5935553	A	19990810	US 1996-758179	19961125
US 6039557	A	20000321	US 1997-833489	19970407
US 5985246	A	19991116	US 1997-888426	19970708
US 6071495	A	20000606	US 1997-942862	19971002
US 6033646	A	20000307	US 1998-26326	19980219
AU 9856271	A1	19980507	AU 1998-56271	19980224
AU 713127	B2	19991125		
US 6551574	B1	20030422	US 1998-52075	19980331
US 6479034	B1	20021112	US 1998-118329	19980717
AU 9888406	A1	19990204	AU 1998-88406	19981009
AU 732440	B2	20010426		
AU 9888405	A1	19981203	AU 1998-88405	19981012
AU 731072	B2	20010322		
HK 1013625	A1	20000420	HK 1998-114978	19981223
AU 9910043	A1	19990304	AU 1999-10043	19990104
GR 3036877	T3	20020131	GR 2001-401740	20011011
US 2003039613	A1	20030227	US 2002-108284	20020326
US 2002150539	A1	20021017	US 2002-113577	20020402
US 2003003055	A1	20030102	US 2002-213600	20020806

PRIORITY APPLN. INFO.:

US 1989-455707	B2	19891222
US 1990-569828	A2	19900820
US 1991-716899	B2	19910618
US 1991-717084	A2	19910618
US 1993-76239	A2	19930611
US 1993-159674	B2	19931130
US 1993-160232	B2	19931130
US 1990-581027	A2	19900911
WO 1990-US7500	W	19901219
US 1991-716793	A	19910618
US 1991-750877	A3	19910826
US 1992-818069	A3	19920108
WO 1992-US2615	A	19920331
US 1992-967974	A3	19921027
US 1993-17683	A3	19930212
US 1993-18112	B3	19930217
US 1993-76250	A2	19930611
US 1993-85608	A3	19930630
US 1993-88268	A3	19930707
US 1993-159687	A2	19931130

US	1993-163039	A3 19931206
US	1994-212553	B2 19940311
AU	1994-69537	A3 19940519
AU	1994-70416	A3 19940519
WO	1994-US5633	W 19940519
EP	1994-919208	A3 19940520
WO	1994-US5792	W 19940520
US	1994-307305	A2 19940916
US	1994-346426	A 19941129
AU	1995-21850	A3 19941130
WO	1994-US13817	W 19941130
US	1995-395683	A3 19950228
US	1995-401974	A2 19950309
US	1995-468056	A3 19950606
US	1995-471250	A3 19950606
US	1995-487230	A3 19950606
US	1995-482294	A3 19950607
US	1995-485998	A3 19950607
US	1996-643070	A3 19960430
US	1996-665719	A3 19960618
US	1996-741598	A3 19961101
US	1997-796798	A3 19970206
US	1998-118329	A3 19980717

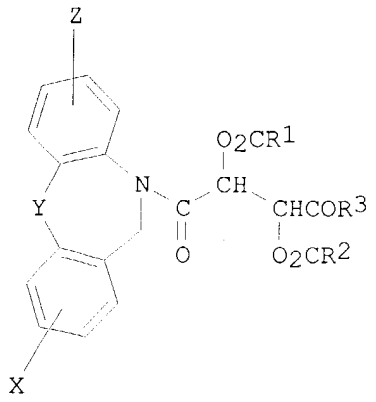
AB Methods of and apparatus for preparing temperature activated gaseous precursor-filled liposomes are described. Gaseous precursor-filled liposomes prepared by these methods are particularly useful, for example, in ultrasonic imaging applications and in therapeutic drug delivery systems. A lipid solution containing 83:8:5 molar ratio of dipalmitoylphosphatidylcholine, dipalmitoylphosphatidylethanolamine bearing PEG, and dipalmitoylphosphatidic acid in 8:1:1 PBS, glycerol, and propylene glycol and perfluorobutane were placed in a microfluidizer and subjected to 20 passes at 16,000 psi at -20°. Limited size vesicles, having a size of 30-50 nm, resulted and upon warming to room temperature, stabilized microspheres of 10 μm resulted.

IT **2551-62-4, Sulfur** hexafluoride
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(temperature-activated gaseous precursor-filled liposomes for ultrasound imaging contrast agents and **drug** delivery agents)

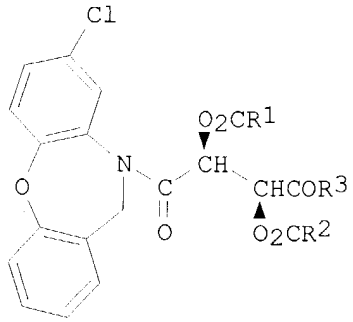
L66 ANSWER 20 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:675127 HCAPLUS
DOCUMENT NUMBER: 123:228229
TITLE: Tartaric acid derivatives of substituted dibenzoxazepine compounds, pharmaceutical compositions and methods of use as analgesics and prostaglandin-E2 antagonists
INVENTOR(S): Chandrakumar, Nizal S.; Mueller, Richard A.
PATENT ASSIGNEE(S): G. D. Searle and Co., USA
SOURCE: U.S., 19 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5424424	A	19950613	US 1993-134345	19931007
US 5604220	A	19970218	US 1995-407512	19950314

PRIORITY APPLN. INFO.: US 1993-134345 19931007
OTHER SOURCE(S): MARPAT 123:228229
GI



I



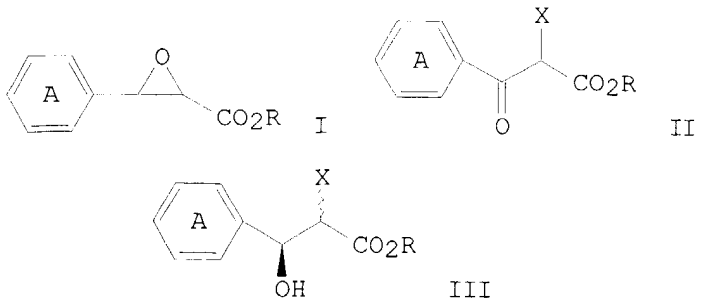
II

AB The present invention provides substituted dibenzoxazepine compds. I [or a pharmaceutically-acceptable salt thereof, wherein: X is hydrogen or halogen; Y is oxygen, **sulfur**, SO or SO2; Z is hydrogen, halogen or CF3; R1, R2 and R4 may be the same or different, and are hydrogen or alkyl; R3 is OH, Oalkyl or NR4-alkylene-R5; and R5 is NR1R2 or aryl] which are useful as analgesic agents for the treatment of pain, and as prostaglandin-E2 antagonists for the treatment of prostaglandin-E2 mediated diseases, pharmaceutical compns. comprising a therapeutically-effective amount of I in combination with a pharmaceutically-acceptable carrier, a method for eliminating or ameliorating pain in an animal, and a method for treating prostaglandin-E2 mediated diseases in an animal, comprising administering a therapeutically-effective amount of I to the animal. Thus, e.g., amidation of αS,βS-bis(acetyloxy)-8-chloro-γ-oxodibenz[b,f][1,4]oxazepine-10(11H)-butanoic acid (preparation given) with 3-(aminomethyl)pyridine followed by HCl treatment afforded the N-(3-pyridylmethyl)butanamide II.HCl (R1 = R2 = Me, R3 = NHCH2-3-pyridyl) which produced analgesia in 9/10 mice in the writhing assay and demonstrated PGE antagonism with an EC50 dose ratio of 0.74.

L66 ANSWER 21 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1992:83384 HCAPLUS
DOCUMENT NUMBER: 116:83384
TITLE: Manufacture of optically active 3-phenylglycidic acid esters
INVENTOR(S): Kawai, Akiyoshi; Inoue, Hirozumi
PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03190865	A2	19910820	JP 1989-333175	19891221
JP 06060169	B4	19940810		

PRIORITY APPLN. INFO.: JP 1989-333175 19891221
OTHER SOURCE(S): CASREACT 116:83384; MARPAT 116:83384
GI



AB Title esters I (R = lower alkyl; ring A may be substituted), useful as intermediates for **pharmaceuticals**, are manufactured by asym. reduction of II (X = halo) with a metal hydride in the presence of an optically active amino acid derivative and a lower aliphatic alc. to III followed by intramol. ring closure. Thus, reduction of 728 mg 2-chloro-3-oxo-3-(4-methoxyphenyl)propionic acid Me ester with LiBH4 in the presence of N,N'-**dibenzoyl**-L-cystine and Me3COH in THF under N at -65° to -70° gave 660 mg mixture of (2R,3S)- and (2S,3S)-2-chloro-3-hydroxy-3-(4-methoxyphenyl)propionic acid Me ester, which was dissolved in MeOH and stirred with NaOMe at 0° and then at room temperature to give 506 mg (2R,3S)-3-(4-methoxyphenyl)glycidic acid Me ester.

IT **7791-25-5, Sulfuryl** chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(chlorination with, of oxo(methoxyphenyl)propionic acid Me ester)

L66 ANSWER 22 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1989:406925 HCAPLUS
DOCUMENT NUMBER: 111:6925
TITLE: Preparation of chlorodiacetyl as material for drugs and agrochemicals
INVENTOR(S): Imuda, Junichi; Ono, Hiroyasu; Tan, Hiroaki; Kihara, Noriaki
PATENT ASSIGNEE(S): Mitsui Petrochemical Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63222140	A2	19880916	JP 1987-53050	19870310
JP 03014815	B4	19910227		

PRIORITY APPLN. INFO.: JP 1987-53050 19870310

AB The title compound (I) is prepared by chlorination of diacetyl by SO2Cl2 in the presence of a compound selected from H2O, alcs., or phenols. A solution of diacetyl and isopropanol in C2H4Cl2 was treated dropwise with SO2Cl2 over 3 h at 60° then the mixture was stirred at the same temperature for 8 h to give 66% I, vs., 1.4% without isopropanol and 1.4% by treating diacetyl and SO2Cl2 in HCl-containing C2H4Cl2.

IT **7791-25-5, Sulfuryl** chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(chlorination by, of diacetyl)

L66 ANSWER 23 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1988:223470 HCAPLUS

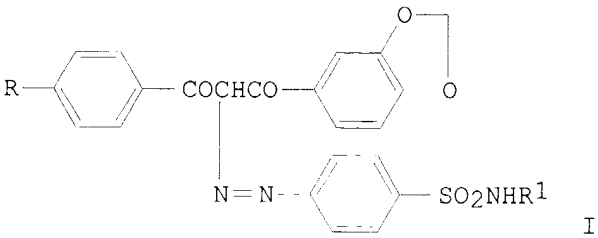
DOCUMENT NUMBER: 108:223470
TITLE: Manufacture of 2,6-dichloroacetanilide
INVENTOR(S): Domnariu, Marioara; Kovendi, Alexandru; Dasoveanu, Mihaela; Szasz, Doina; Radu, Ana
PATENT ASSIGNEE(S): Intreprinderea de Medicamente "Terapia", Rom.
SOURCE: Rom., 2 pp.
CODEN: RUXXA3
DOCUMENT TYPE: Patent
LANGUAGE: Romanian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RO 92494	B1	19871030	RO 1985-118749	19850515

PRIORITY APPLN. INFO.: RO 1985-118749 19850515

AB 2,6-Dichloroacetanilide (I) of good purity, useful as an intermediate in the manufacture of Diclofenac sodium **pharmaceutical**, is prepared in high yields by acetylation of 2,6-dichloroaniline(II) with Ac2O in the presence of H2SO4 catalyst in C6H6, followed by hydrolysis of **diacetyl** derivative byproduct with 25% NH3 solution at 40°. Stirring 1.1 kg II, 8.1 kg C6H6, 1.02 L Ac2O, and 0.005 L H2SO4 2 h at reflux, cooling to 25°, adding 0.65 L water to hydrolyze excess Ac2O, cooling to 20-25°, adding 1.4 L 25% NH3 solution in such a way that the temperature remained below 35-40° with stirring, stirring the mixture 4 h at 40° and 16 h at room temperature, adding 10 L cold water with stirring, filtering, washing the precipitate with water, and drying gave 85% white I crystals with m.p. 169-173°.

L66 ANSWER 24 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1983:594913 HCAPLUS
DOCUMENT NUMBER: 99:194913
TITLE: Synthesis and spectral studies of some potential antimicrobial diazo-diaryl 1,3-diketones. Part II
AUTHOR(S): Bhagwan, J.; Joshi, Y. C.; Tyagi, R. P.; Joshi, B. C.; Mangal, H. N.
CORPORATE SOURCE: Dep. Chem., Univ. Rajasthan, Jaipur, 302 004, India
SOURCE: Journal of the Institution of Chemists (India) (1983), 55(2), 58-60
CODEN: JOICA7; ISSN: 0020-3254
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 99:194913
GI



I

AB The title compds. I (R = H, Me, OMe, F, Cl, Br; R1 = sulfa **drug** residue) (72 compds.) were prepared by diazotizing sulfa compds. and reaction with the **diketone**. I had moderate bactericidal activity (no data).
IT **144-82-1**

RL: PRP (Properties)
(diazotization and coupling of, with dibenzoylmethane derivs.)

L66 ANSWER 25 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1967:464901 HCAPLUS
DOCUMENT NUMBER: 67:64901
TITLE: Method of cleaving S-S bonds in organic compounds using metal organic compounds
INVENTOR(S): Wang, Chi Hua
PATENT ASSIGNEE(S): Little, Arthur D., Inc.
SOURCE: U.S., 3 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3328368		19670627	US	19630520

AB Disulfide linkages are cleaved in solution by a redox system consisting of a β- **diketone** chelate or a metallocene, giving thiyl radicals and mercaptide ions. Thus, 10 g. of acrylonitrile and 20 mg. of an organometallic compound were placed in 1 arm of a double-arm tube, and 20 mg. of disulfide dissolved in MeOH were placed in the other arm. The tube was evacuated to 10-2 mm., and the 2 solns. were mixed. Polymerization was indicated by the appearance of turbidity (disulfide, organometallic compound, and turbidity given): PhSSPh, dicyclopentadienyliron (I), yes; PhSSPh, vanadium acetylacetonate (II), yes; lipoic acid (III), II, yes; di-p-tolyl disulfide, dicyclopentadienylcobalt, yes; naphthacene tetrasulfide, I, yes; di-n-heptyl disulfide, II, yes; -, I, no; III, -, number The free radicals produced by this system can also be used in biol. research for the study of crosslinking in proteins, radiation protection, and applications in **chemotherapy**. This method is simpler than the prior processes of photodissocn. and thermal dissociation, and does not require an energy input.

IT **16734-12-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(cleavage of, catalysts for, metal complexes as)

L66 ANSWER 26 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1966:429492 HCAPLUS
DOCUMENT NUMBER: 65:29492
ORIGINAL REFERENCE NO.: 65:5470b-h
TITLE: Thiamine-pantethine disulfides
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd.
SOURCE: 5 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 1418664		19651119	FR	
PRIORITY APPLN. INFO.:			JP	19631226

GI For diagram(s), see printed CA Issue.

AB Thiamine-pantethine disulfides (I), where R, R1, and R2 are H or acyl radicals with 1 to 7 C atoms, and with **pharmacological** properties are prepared as follows: a solution of 1.6 g. $Na_2S_2O_3 \cdot 5H_2O$ in 10 cc. EtOH is added slowly to a solution of 2.4 g. γ-benzoylpantethine ethylenimide in 10 cc. EtOH, and then 3.2 cc. 2N HCl are added. The solution is evaporated in vacuo, and the residue extracted with EtOH to give 1.9 g. sodium

salt of γ-benzoyl-S-sulfopantethine (II). A solution of 2.9 g. NaOH in 8 cc. water is added to a solution of 8.1 g. thiamine chloride HCl (III) in 10 cc. H2O, saturated with NaCl and mixed with a solution of 11.5 g. II in H2O, and stirred 15 min. The resinous precipitate is extracted with 200 cc. CHCl3. The extract is washed with H2O, extracted with diluted HCl and made alkaline with NaHCO3, and the precipitate is again extracted with CHCl3 to give 7.2 g. thiamine-γ-benzoylpantethine disulfide (IV). A solution of 3.6 g. NaOH in 10 cc. H2O is added to a solution of 10 g. III in 15 cc. H2O. Then 16 g. sodium salt of α-acetyl-γ-benzoyl-S-sulfopantethine is added with stirring and the precipitate is extracted with 150 cc. CHCl3 to give 10.5 g. thiamine-α-acetyl-γ-benzoylpantethine disulfide, m. 85°. A solution of 1.7 g. III in 5 cc. H2O is treated with 6 cc. 10% aqueous NaOH and kept 30 min. and saturated with NaCl, mixed with 2.3 g. Et3N salt of S-sulfopantethine, and 30 cc. BuOH, and stirred 15 min. The BuOH layer is treated with ether to give a precipitate of a mixture of pantethine, thiamine-pantethine disulfide, and thiamine disulfide, which is chromatographed over silica gel with 1:1 Me2CO-MeOH to give pure thiamine-pantethine disulfide. A solution of 3.4 g. III in 5 cc. H2O is treated with 12 cc. 10% aqueous NaOH and kept 30 min., saturated with NaCl, mixed with 4.6 g. sodium salt of α,γ- **diacetyl** -S-sulfopantethine, and 30 cc. EtOAc, and stirred 10 min. The EtOAc layer is washed with H2O and extracted with 2N HCl which extract is neutralized with NaHCO3 and extracted with EtOAc to give thiamine-α,γ,-diacetylpantethine disulfide. A solution of 30% H2O2 is added to a solution of 7 g. γ-benzoylpantethine (V) in 30 cc. AcOH, cooled 1 hr. at 0°, and kept overnight. The mixture is poured into H2O, neutralized with NaHCO3, and extracted with CHCl3, to give 6 g. γ-benzoylpantethine sulfoxide, which in 50 cc. 50% aqueous EtOH is mixed with a solution of 2.8 g. III in 15 cc. H2O, and 1 cc. 10% aqueous NaOH. The mixture is kept overnight, the EtOH stripped and the aqueous solution is diluted with more H2O and extracted with CHCl3. The extract is treated as before with HCl to give IV. A solution of 8.5 g. V in 100 cc. MeOH is mixed with 4 cc. 10% NaOH and 100 cc. H2O and the resulting solution is added to a mixture of 3.4 g. thiamine chloride, 12 cc. 10% aqueous NaOH, and 200 cc. H2O. The resulting mixture is stirred while a solution of 20 g. iodine, 14 g. KI, and 200 cc. H2O is added slowly to it and then extracted with CHCl3. The extract is washed with aqueous NaHSO3, H2O, and treated with HCl as before to give IV. A solution of 5.8 g. O-acetylthiamine HCl, 5 cc. H2O, and 12 cc. 10% NaOH is mixed with a solution of 5 g. II in 5 cc. H2O to give 3 g. O-acetylthiamine-γ-benzoylpantethine disulfide. A solution of 4.4 g. O-benzoylthiamine HCl, 5 cc. H2O, and 12 cc. 10% NaOH is mixed with a solution of 5 g. II in 5 cc. H2O. The mixture is stirred and extracted with 30 cc. CHCl3. The extract is washed with H2O, dried and evaporated in vacuo. The residue is treated with 50 cc. Et2O. The precipitate is filtered off, and extracted with diluted aqueous HCl. The acidic extract is filtered and neutralized with NaHCO3 to give a precipitate which is extracted with CHCl3 and treated as before to give 2 g. O-benzoylthiamine-γ-benzoylpantethine disulfide.

L66 ANSWER 27 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1963:409045 HCAPLUS
DOCUMENT NUMBER: 59:9045
ORIGINAL REFERENCE NO.: 59:1658b-d
TITLE: **Sulfur**-containing purine and pteridine compounds
PATENT ASSIGNEE(S): Wellcome Foundation Ltd.
SOURCE: 3 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

GB 920267 19630306 GB
PRIORITY APPLN. INFO.: US 19580516
GI For diagram(s), see printed CA Issue.
AB Inhibitors of microbial growth, some of which suppress neoplastic growth and have **pharmacol.** activity on the mammalian circulatory system are prepared by treating a chlorine-substituted derivative with an anion (SY)-, or treating a 4,5-diamino-6-mercaptopyrimidine with an α-**diketone.** Thus, 4 g. 4,5-diamino-6-mercaptopyrimidine was treated with 2.5 ml. **diacetyl** to form 4.7 g. 4-mercapto-6,7-dimethylpteridine, λ 258, 382 mμ at pH 1 and 265, 390 mμ at pH 11. Also prepared were 2-amino-4-mercaptopteridine (I), λ 245, 282, 372 mμ at pH 1 and 280, 330, 405 mμ at pH 11; 4-mercapto-7-hydroxypteridine, λ 248, 330 mμ at pH 1, 250, 313 mμ at pH 11. 2-Amino-6-chloro-8-hydroxypurine was treated with 2N sodium hydrosulfide to yield 2-amino-6-mercapto-8-hydroxypurine (II), λ 251, 350 mμ at pH 1 and 239, 325 mμ at pH 11; others prepared include 6-(4-chlorophenylthio)purine, m. 265-7° (decomposition), λ 250, 292 mμ at pH 1, 294 mμ at pH 11; 6-(2-methylphenylthio)purine, m. 161-3° (decomposition), λ 295 mμ at pH 1, 293 mμ at pH 11; 6-(3-methylphenylthio)purine, m. 214-15° (decomposition), λ 295 mμ at pH 1, 293 mμ at pH 11; 6-(4-methylphenylthio)purine, m. 239-40° (decomposition), λ 295 mμ at pH 1, 293 mμ at pH 11.

L66 ANSWER 28 OF 28 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1954:60564 HCAPLUS
DOCUMENT NUMBER: 48:60564
ORIGINAL REFERENCE NO.: 48:10771i,10772a
TITLE: **Sulfur**-containing β-dicarbonyl compounds
INVENTOR(S): Bohme, Horst
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 867394		19530216	DE	

AB α-Halogenated thio ethers with monosubstituted β-**diketones** or β-keto carboxylic esters or their salts give S-containing β-dicarbonyl compns. useful as solvents, perfumes, pesticides, softeners, or intermediates of the manufacture of **pharmaceutical** agents. BzCHMeAc (7.8 g.) dropped with stirring on 1 g. Na wire under 100 cc. Et2O to produce, with H evolution, the Et2O-soluble Na salt; 4.3 g. ClCH2SMe (I) is then added, the mixture heated 2 hrs. on the steam bath, the NaCl removed by addition of water, and the Et2O solution dried over CaCl and fractionated to give 5.5 g. MeBz(MeSCH2)CAc, b11 180°, AcPh(MeSCH2)CCO2Et, b11, 178-80°, is similarly prepared from I and AcCHPhCO2Et.

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=> d stat que
L1 49 SEA FILE=REGISTRY ABB=ON PLU=ON DIKETONE?
L2 21774 SEA FILE=REGISTRY ABB=ON PLU=ON SULFUR/BI
L3 SEL PLU=ON L1 1- CHEM : 210 TERMS
L4 37613 SEA FILE=HCAPLUS ABB=ON PLU=ON L3
L5 54254 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 OR ?DIKETONE?
L6 589911 SEA FILE=HCAPLUS ABB=ON PLU=ON L2 OR ?SULFUR?
L7 1818 SEA FILE=HCAPLUS ABB=ON PLU=ON L6 AND L5
L9 28 SEA FILE=HCAPLUS ABB=ON PLU=ON L7 AND (?ANESTHE? OR ?HISTAMIN

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                ?OINTMENT? OR URGENT? OR ?ITCH?)
L10           18 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L9 NOT (FLAVOR? OR CREAM(W)BUT
                TER OR FOOD#)
L13             STR

O=C--C=O
1  2  3  4


NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   4

STEREO ATTRIBUTES: NONE
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L18      117304 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L17
L20        1606 SEA FILE=REGISTRY ABB=ON  PLU=ON  COLLOID? OR SUSPENSION? OR
                DISPERS?
L21     1941897 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L20 OR COLLOID? OR SUSPENSION?
                 OR DISPERS?
L22      140971 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L21(L)L6
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L30         654 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L29 AND L22
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                OR URGENT? OR ?ITCH?)
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                FLAVOR? OR FOOD#)
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                OR ?MEDICAL? OR ?DRUG? OR ?COSMET?)
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L69           3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L68 NOT (L10 OR L34 OR L60 OR
                L66)


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L69  ANSWER 1 OF 3  HCAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         2004:100971  HCAPLUS
DOCUMENT NUMBER:          140:169245
TITLE:                    Non-amphoteric glutathione derivative compositions for
                          topical application
INVENTOR(S):              Yu, Ruey J.; Van Scott, Eugene J.
PATENT ASSIGNEE(S):       USA
SOURCE:                   PCT Int. Appl., 29 pp.
                          CODEN: PIXXD2
```

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004010968	A1	20040205	WO 2003-US24048	20030731

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-400252P P 20020731
US 2003-626158 A 20030724

AB Topical compns. and methods including non-amphoteric derivs. of glutathione, for example, N-acyl-glutathiones, N-acyl-glutathione amides, and N-acyl-glutathione esters are disclosed for use in the treatment and prevention of cosmetic conditions and dermatol. disorders, are disclosed. The non-amphoteric glutathione derivs. may have the structure of (I): R' -COCHNH (R2) H2CH2CONHCH(CH2SR3) CONHCH2 CO-R' wherein R' is independently selected from -OH, -NH2, -NHNH2, an alkoxyl group, an aralkoxyl group, and an aryloxyl group and R2 and R3 are each independently selected from a hydrogen atom or an acyl group, but if at least one R' is -OH, -NH2, or -NHNH2, then R2 is an acyl group.

IT **7446-34-6**, Selenium sulfide **7704-34-9**, **Sulfur**, biological studies
RL: COS (Cosmetic use); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(non-amphoteric glutathione derivative compns. for topical application)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:300448 HCAPLUS
DOCUMENT NUMBER: 134:294926
TITLE: Use of N,N'-(3,3-dimethylbutyl)-L-α-aspartyl-L-phenylalanine 1-methyl ester (neotame) to modify mouthfeel perception
INVENTOR(S): Walters, Gale C.; Hatchwell, Leora C.; Gerlat, Paula A.; Ferraro, Karen L.
PATENT ASSIGNEE(S): The Nutrasweet Company, USA
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001028362	A1	20010426	WO 2000-US28734	20001018

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,

SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: US 1999-160304P P 19991019
AB Addition of neotame to food formulations improves mouthfeel. Thus, addition of 2 ppm neotame to an aqueous solution containing 25 ppm spearmint oil imparted a rounder mouthfeel.
IT **137-00-8, Sulfurol 431-03-8, Diacetyl**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(neotame modification of mouthfeel)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L69 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:441571 HCAPLUS
DOCUMENT NUMBER: 133:57991
TITLE: Use of N-neohexyl-α-aspartyl-L-phenylalanine methyl ester as a flavor modifier
INVENTOR(S): Gerlat, Paula A.; Hatchwell, Leora C.; Walters, Gale C.; Miraglio, Angela; Sawyer, Harold A.
PATENT ASSIGNEE(S): The Nutrasweet Company, USA
SOURCE: PCT Int. Appl., 87 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000036933	A1	20000629	WO 1999-US29851	19991217

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2003008046	A1	20030109	US 1999-465837	19991217

PRIORITY APPLN. INFO.: US 1998-112948P P 19981218
AB This invention relates to the use of N-[N-(3,3-dimethylbutyl)-L-α-aspartyl]-L-phenylalanine 1-Me ester, or neotame, as a flavor (taste and/or aroma) modifier in foods, cosmetics and drugs, and compns. containing the same.
IT **137-00-8, Sulfurol 431-03-8, 2, 3-Butanedione**
RL: BPR (Biological process); BSU (Biological study, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(use of N-neohexyl-α-aspartyl-L-phenylalanine Me ester as a flavor and aroma modifier)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> => d stat que 172
L1 49 SEA FILE=REGISTRY ABB=ON PLU=ON DIKETONE?
L2 21774 SEA FILE=REGISTRY ABB=ON PLU=ON SULFUR/BI

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L3              SEL  PLU=ON  L1 1- CHEM :     210 TERMS
L4         37613 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L3
L5         54254 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L4 OR ?DIKETONE?
L6        589911 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L2 OR ?SULFUR?
L7          1818 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6 AND L5
L9            28 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L7 AND (?ANESTHE? OR ?HISTAMIN
                 E? OR ?CORTICOST? OR ?IRRITANT? OR ?CREAM? OR ?LOTION? OR
                 ?OINTMENT? OR URGENT? OR ?ITCH?)
L10           18 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L9 NOT (FLAVOR? OR CREAM(W)BUT
                 TER OR FOOD#)
L13             STR
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NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   4

STEREO ATTRIBUTES: NONE
L15             SCR 1838
L17        12842 SEA FILE=REGISTRY SSS FUL L13 NOT L15
L18       117304 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L17
L20         1606 SEA FILE=REGISTRY ABB=ON  PLU=ON  COLLOID? OR SUSPENSION? OR
                 DISPERS?
L21      1941897 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L20 OR COLLOID? OR SUSPENSION?
                  OR DISPERS?
L22       140971 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L21(L)L6
L29         6235 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6 AND L18
L30          654 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L29 AND L22
L31       482726 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (?ANESTHE? OR ?HISTAMINE? OR
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                 OR URGENT? OR ?ITCH?)
L32           20 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L31 AND L30
L33           19 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L32 NOT L10
L34           17 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L33 NOT (CREAM(W)BUTTER OR
                 FLAVOR? OR FOOD#)
L58       151635 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ?DIONE
L59          485 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L58 AND L22
L60           24 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L59 AND (?PHARM? OR ?THERAP?
                 OR ?MEDICAL? OR ?DRUG? OR ?COSMET?)
L64          848 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L5(L)(?PHARM? OR ?THERAP? OR
                 ?MEDICAL? OR ?DRUG? OR ?COSMET?)
L65           29 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L64 AND L6
L66           28 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L65 NOT (L10 OR L34 OR L60)
L67       101410 SEA FILE=HCAPLUS ABB=ON  PLU=ON  "DRUG DELIVERY SYSTEMS"/CV
L70         4094 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L58 AND L6
L71           32 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L70 AND L67
L72           27 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L71 NOT (L10 OR L34 OR L60 OR
                 L66)


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=> d ibib abs hitrn l72 1-27

L72  ANSWER 1 OF 27  HCAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:        2004:472319  HCAPLUS
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TITLE: **Sulfur** heterocycle-condensed **pyrimidinedione** derivatives, prodrugs of them, JNK inhibitors containing them, and pharmaceuticals containing them
INVENTOR(S): Ito, Fumio; Kimura, Hiroyuki; Ikata, Hideki; Kitamura, Shuji; Kawamoto, Tomohiro; Abe, Hidenori
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 117 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004161716	A2	20040610	JP 2002-332027	20021115

PRIORITY APPLN. INFO.: JP 2002-332027 20021115

AB The derivs., useful for prevention and treatment of diseases involving JNK, e.g. cardiac failure, hypertension, rheumatoid arthritis, asthma, Alzheimer's disease, ischemia, etc., are represented by I [R = H, (un)substituted hydrocarbyl, (un)substituted heterocyclyl; X1, X2 = (un)substituted C2-4 alkylene; X3 = direct bond, (un)substituted C1-5 alkylene, (un)substituted C2-4 alkenylene; Y = direct bond, (un)substituted divalent cyclic group; Q = direct bond, O, S, NR1 [R1 = H, (un)substituted lower alkyl]; L = direct bond, CONR2 [R2 = H, (un)substituted lower alkyl]; ring A = (un)substituted N-heterocycle; n = 0, 1, 2]. JNK inhibitors contain I, their salts, or prodrugs of I. Thus, IC50 of 4-(6-aminopyridin-3-yl)-N-[3-(1,1,6,8-tetraoxo-9-phenyl-1,3,4,8-tetrahydro-2H-1λ6-pyrimido[6,1-b][1,3]thiazin-7-yl)propyl]benzamide hydrochloride (II preparation given) against human JNK1 was 0.00082 μM. Capsules and tablets containing II were also formulated.
IT INDEXING IN PROGRESS

L72 ANSWER 2 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:467712 HCAPLUS
TITLE: Methods and compositions for drug loading in liposomes by transmembrane pH gradient
INVENTOR(S): Jensen, Gerard M.; Sulivan, Michele; Yang, Stephanie; Hu, Ning
PATENT ASSIGNEE(S): Gilead Sciences, Inc., USA
SOURCE: PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004047801	A2	20040610	WO 2003-US37964	20031126

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-429122P P 20021126

AB A method for encapsulation of pharmaceutical agents (e.g., antineoplastic agents) in liposomes is provided, having preferably a high drug:lipid ratio. Liposomes can be made by a process that loads the drug by an active mechanism using a transmembrane pH gradient. Using this technique, trapping efficiencies approach 100%. Drug:lipid ratios employed are higher than for older traditional liposome prepns., and the release rate of the drug from the liposomes is reduced. After loading, residual acid is quenched with a quenching agent that is base permeable at low temps. The residual acidity is thus reduced and chemical stability (e.g. against hydrolysis) is enhanced. The stability of both the liposome and the pharmaceutical agent is thus maintained, prior to administration. The pH gradient is, however, present when the liposome is administered in vivo because the quenching agent rapidly exits the liposome.

L72 ANSWER 3 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:467711 HCAPLUS
TITLE: Method of drug loading in liposomes by transmembrane pH gradient
INVENTOR(S): Sulivan, Michele; Yang, Stephanie; Hu, Ning; Jensen, Gerard M.
PATENT ASSIGNEE(S): Gilead Sciences, Inc., USA
SOURCE: PCT Int. Appl., 49 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004047800	A2	20040610	WO 2003-US37790	20031126

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-429122P P 20021126
AB A method for encapsulation of pharmaceutical agents (e.g., antineoplastic agents) in liposomes is provided, having preferably a high drug:lipid ratio. Liposomes can be made by a process that loads the drug by an active mechanism using a transmembrane pH gradient. Using this technique, trapping efficiencies approach 100%. Drug:lipid ratios employed are higher than for older traditional liposome prepns., and the release rate of the drug from the liposomes is reduced. After loading, residual acid is quenched with a quenching agent that is base permeable at low temps. The residual acidity is thus reduced and chemical stability (e.g. against hydrolysis) is enhanced. The stability of both the liposome and the pharmaceutical agent is thus maintained, prior to administration. The pH gradient is, however, present when the liposome is administered in vivo because the quenching agent rapidly exits the liposome.

L72 ANSWER 4 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:452990 HCAPLUS
DOCUMENT NUMBER: 141:1226
TITLE: Lapachone compounds for the treatment of proliferative disorders, including cancer
INVENTOR(S): Jiang, Zhiwei; Reddy, Dasharatha; Ackerman, Samuel K.;

Salvesen, June
PATENT ASSIGNEE(S): Arqule, Inc., USA
SOURCE: PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004045557	A2	20040603	WO 2003-US37219	20031118

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-427283P P 20021118

AB The invention provides lapachone analogs and derivs. as well as methods of use thereof. These compds. can be used in pharmaceutical compns. for the treatment or prevention of cell proliferation disorders. These compds. can also be used in the treatment or prevention of psoriasis or cancer or precancerous conditions. Compound preparation is included.

L72 ANSWER 5 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:101158 HCAPLUS
DOCUMENT NUMBER: 140:146014
TITLE: Preparation of 4-[[(1-acylaminocyclohexyl)carbonyl]amino]-1-phenylpiperidin-3-ones as cysteine protease inhibitors and processes for their preparation
INVENTOR(S): Lee, Jong-Wook; Lee, Bong-Yong; Lee, Chun-Ho; Hur, Yun; Han, Tae-Dong; Ko, Hyun-Kyoung; Yun, Suk-Won; Shim, Jae-Young; Lim, Joong-In; Son, Moon-Ho; Yang, Jae-Sung; Kim, Mi-Kyung
PATENT ASSIGNEE(S): Yuhan Corporation, S. Korea; Dong-A Pharmaceutical Co., Ltd.
SOURCE: PCT Int. Appl., 158 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

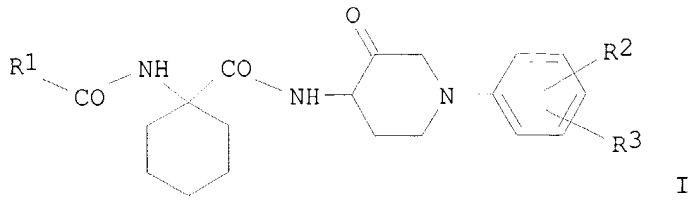
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004011457	A1	20040205	WO 2003-KR1502	20030726

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: KR 2002-44164 A 20020726
KR 2003-13889 A 20030306

OTHER SOURCE(S): MARPAT 140:146014

GI



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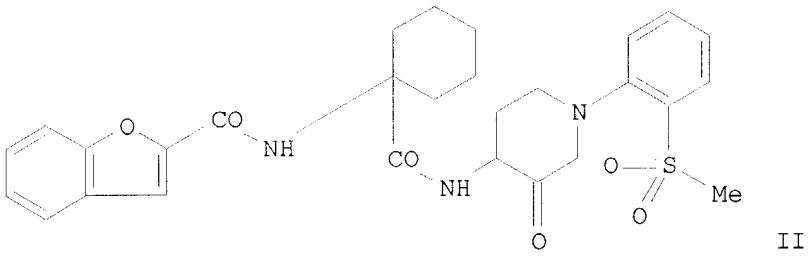


II

AB The present invention provides 1-phenylpiperidin-3-ones (shown as I; variables defined below; e.g. II) and pharmaceutically acceptable salts thereof, having cysteine protease inhibitory activity, pharmaceutical compns. containing the same as an active ingredient, and processes for the preparation thereof. For I: R1 is C1-6 alkyl (un)substituted with Ph, C1-6 alkoxy, or benzyloxy; C2-6 alkenyl (un)substituted with phenyl; C3-6 cycloalkyl; C1-5 alkoxy; Ph substituted with halogen, Ph, trifluoromethoxy, oxopyrrolidyl, mono- or di- C1-4 alkylamino or R4-C1-4-alkoxy (R4 is morpholine, pyrrolidine or piperidine); furanyl (un)substituted with ≥1 functional groups C1-6 alkyl, halogen, and oxopyrrolidyl; benzofuranyl (un)substituted with C1-6 alkyl or R4-C1-4 alkoxy; thiophenyl substituted with C1-6 alkyl or halogen; C1-6 alkylisoxazolyl; pyridyl (un)substituted with halogen; morpholinyl; benzothiophenyl; quinolinyl; pyrazinyl; benzyloxy; oxopyranyl; C1-6 alkyl-7H-imidazo[2,1-b]oxazolyl; C1-6 alkylchromon-2-yl; or (N-tert-butoxycarbonyl)piperidinyl. R2 and R3 are H; hydroxy; nitro; halogen; cyano; C1-6 alkyl (un)substituted with ≥1 halogen atoms; C1-5 alkoxy; C1-5 alkylthio; furyl; 1H-tetrazol-5-yl; oxazolyl; -C(O)R4; -S(O)nR6, -NR7R8 (R5 is H; hydroxy; C1-6 alkyl; C1-5 alkoxy; mono- or di- C1-6 alkylamino; or C3-6 cycloalkylamino; R6 is C1-6 alkyl; Ph (un)substituted with C1-4 alkoxy; benzyl (un)substituted with C1-4 alkoxy; R7 and R8 are H; C1-6 alkylcarbonyl (un)substituted with halogen, C1-4 alkoxy, or phenyl; C2-6 alkenylcarbonyl; C1-4 alkoxycarbonyl; C3-6 cycloalkylcarbonyl; benzoyl (un)substituted with ≥1 halogen atoms; mono- or di- C1-4 alkylcarbamoyl; or C1-4 alkylsulfonyl, or bonded each ether to form a morpholine, azetidin-2-one, 3,3-dimethylazetidin-2-one, pyrrolidin-2-one, pyrrole, 2,5-dihydropyrrole, piperidin-2-one, oxazolidin-2-one, imidazolidin-2-one, imidazolidin-2,5-**dione**, tetrazole, 1,1-dioxoisothiazolidine, or C1-6 alkylaziridin-2-one ring; and n = 0-2). Methods of preparation are claimed and .apprx.190 example prepns. are included. For example, II was prepared in 4 steps starting with amide formation from tert-Bu 4-amino-3-hydroxypiperidine-1-carboxylate and 1-[N-[(benzofuran-2-yl)carbonyl]amino]cyclohexanecarboxylic acid to give 4-[N-[[1-[N-[(benzofuran-2-yl)carbonyl]amino]cyclohexyl]carbonyl]amino]-1-(tert-butoxycarbonyl)-3-piperidinol followed by N-deprotection to give 4-[N-[[1-[N-[(benzofuran-2-yl)carbonyl]amino]cyclohexyl]carbonyl]amino]-3-

piperidinol hydrochloride, followed by N-arylation with 2-fluorophenyl Me sulfone in the presence of K2CO3 to give 4-[N-[[1-[N-[(benzofuran-2-yl)carbonyl]amino]cyclohexyl]carbonyl]amino]-1-(2-methylsulfonylphenyl)piperidin-3-ol, followed by oxidation by pyridine-SO3 complex to give II. In some other N-arylations, in addition to the presence of a base, a Pd complex was used as catalyst. IC50 values for inhibition of cathepsin K activity and selectivity for cathepsin K vs. other cathepsins (C, G, H, L, S) are tabulated for many examples of I; e.g. 8.17 nM for II for cathepsin K (382, >240, >240, 138, and 133 nM, resp., for others). The bioavailabilities of I by oral administrations, which were calculated after i.v. administrations of 10 mg/kg of rat, were .apprx.30-90 %.

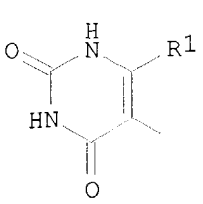
IT **28322-92-1**, Pyridine-SO3 complex
RL: RGT (Reagent); RACT (Reactant or reagent)
(oxidizing agent for piperidinol; preparation of 4-[[(1-acylaminocyclohexyl)carbonyl]amino]-1-phenylpiperidin-3-ones as cysteine protease inhibitors and processes for their preparation)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L72 ANSWER 6 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:971727 HCAPLUS
DOCUMENT NUMBER: 140:16741
TITLE: Preparation of uracil derivatives as inhibitors of TNF-α converting enzyme (TACE) and matrix metalloproteinases
INVENTOR(S): Maduskuie, Thomas P.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 31 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003229081	A1	20031211	US 2003-389529	20030314

PRIORITY APPLN. INFO.: US 2002-365334P P 20020318
OTHER SOURCE(S): MARPAT 140:16741
GI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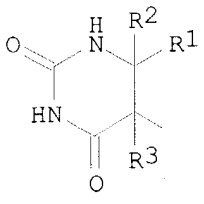
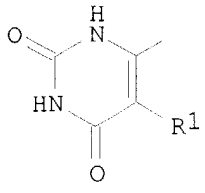

III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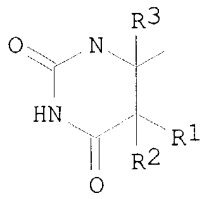
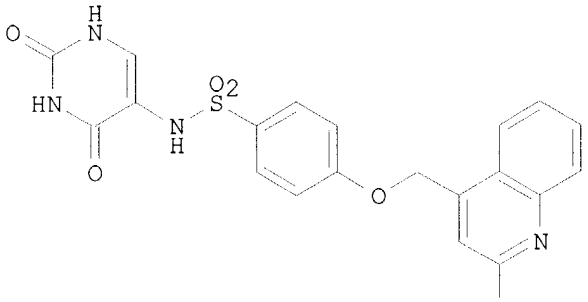

V


VI

AB The title compds. A-W-U-X-Y-Z-Ua-Xa-Ya-Za [I; A = II-V; W = a bond, O, CO, CO2, (un)substituted NH, etc.; X = a bond, alkylene, alkenylene, alkynylene; Y = a bond, O, (un)substituted NH, SOp, CO; Z = carbocycle, heterocycle; Ua = O, CO, OCO, CO2, etc.; Xa = a bond, alkylene, alkenylene, alkynylene; Ya = a bond, O, CO, SOp, (un)substituted NH; Za = H, carbocyle, heterocycle; provided that U, Y, Z, Ua, Ya, and Za do not combine to form NN, NO, ON, OO, SOpO, OSOp, SOpSOp group; R1 = H, CF3, alkyl, etc.; R2 = H, alkyl, alkenyl, alkynyl; R3 = H, alkyl, alkenyl, alkynyl; p = 0-2; with the provisos], useful as inhibitors of TNF-α converting enzyme (TACE), matrix metalloproteinases (MMP), aggrecanase or a combination thereof, were prepared E.g., a 3-step synthesis of VI.TFA (starting from 4-hydroxybenzenesulfonic acid sodium salt and 4-chloromethyl-2-methylquinoline), was given. A number of compds. I were found to exhibit Ki's of ≤ 10 μM in MMP assays. The pharmaceutical composition comprising the compound I is claimed.

IT **7719-09-7**, Thionyl chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of uracil derivs. as inhibitors of TNF-α converting enzyme (TACE) and matrix metalloproteinases)

L72 ANSWER 7 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:931209 HCAPLUS
DOCUMENT NUMBER: 140:787
TITLE: Agitation process for the preparation and activation of drugs and other substances, and production means
INVENTOR(S): Whyte, Susan Kay
PATENT ASSIGNEE(S): Chemstop Pty Ltd, Australia
SOURCE: PCT Int. Appl., 90 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003097095	A1	20031127	WO 2003-AU607	20030520

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: AU 2002-2400 A 20020520
AU 2002-2480 A 20020522

AB The invention discloses a process for the preparation and activation of a substance and a means for producing the activated substance. In particular, the invention discloses a method for treating a disease in a subject in need of such treatment, comprising administering a substance or active agent which comprises one or more components which have been agitated such that a harmonic of 20-50 Hz has been produced, in an amount effective to treat the disease, with the proviso that the disease is not an airway disorder.

IT **64902-72-3**, GLEAN **74223-64-6**, ALLY **79277-27-3**, PINNACLE **79277-67-1**, **Thifensulfuron 79510-48-8**, **Metsulfuron 82097-50-5**, **Triasulfuron 83055-99-6**, LONDAX **86209-51-0**, BEACON **94125-34-5**, **Prosulfuron 99283-01-9**, **Bensulfuron 100784-20-1**, SEMPRA **111353-84-5**, **Ethametsulfuron 111991-09-4**, **Nicosulfuron 113036-87-6**, **Primisulfuron 120162-55-2**, **AZIMSULfuroN 122931-48-0**, **Rimsulfuron 126535-15-7**, UPBEET **135397-30-7**, **Halosulfuron 135990-29-3**, **Triflusulfuron 141776-32-1**, **Sulfosulfuron 144651-06-9**, **Oxasulfuron 144740-53-4**, **FLUPYRSULfuroN** methyl
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(agitation process for preparation and activation of drugs and other substances, and production means)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L72 ANSWER 8 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:777532 HCAPLUS
DOCUMENT NUMBER: 139:296920
TITLE: Uracil derivatives as inhibitors of TNF-α converting enzyme (TACE) and matrix metalloproteinases
INVENTOR(S): Maduskuie, Thomas P.
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
SOURCE: PCT Int. Appl., 105 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003079986	A2	20031002	WO 2003-US8412	20030314
WO 2003079986	A3	20040513		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,

TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: US 2002-365334P P 20020318
OTHER SOURCE(S): MARPAT 139:296920
AB The present application describes novel uracil derivs. of formula I: A-W-U-X-Y-Z-Ua-Xa-Ya-Za or pharmaceutically acceptable salt or prodrug forms thereof, wherein A, W, U, X, Y, Z, Ua, Xa, Ya, and Za are defined in the present specification, which are useful as inhibitors of TNF-α converting enzyme (TACE), matrix metalloproteinases (MMP), aggrecanase or a combination thereof.
IT **7719-09-7**, Thionyl chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(uracil derivs. as inhibitors of TNF-α converting enzyme (TACE) and matrix metalloproteinases)

L72 ANSWER 9 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:757676 HCAPLUS
DOCUMENT NUMBER: 139:276813
TITLE: Preparation of dihydroindol-2-ones as steroid hormone nuclear receptor modulators for treatment of congestive heart failure and other conditions
INVENTOR(S): Grese, Timothy Alan; Jadhav, Prabhakar Kondaji; Neel, David Andrew; Steinberg, Mitchell Irvin; Lander, Peter Ambrose
PATENT ASSIGNEE(S): Eli Lilly and Company, USA
SOURCE: PCT Int. Appl., 220 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003078394	A1	20030925	WO 2003-US6152	20030311

W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: US 2002-365212P P 20020315
OTHER SOURCE(S): MARPAT 139:276813
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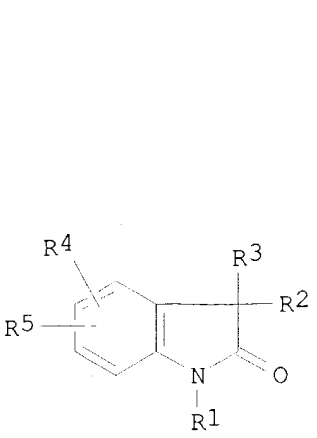

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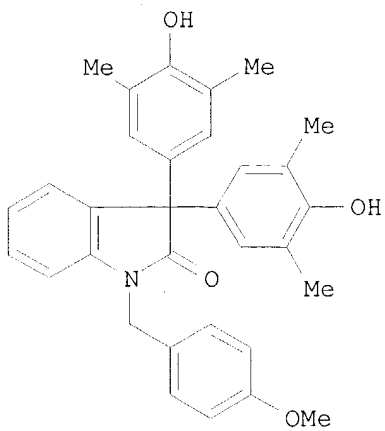


II

AB Title compds. I [wherein R1 = (halo)alkyl, cycloalkoxy, (alkyl)cycloalkyl, alkyl(cyclo)alkoxy, alkenyl, alkynyl, CH2CN, CH2COR7, or (un)substituted (alkyl)aryl or (alkyl)heterocyclyl; R2 = (halo)alkyl, hydroxyalkyl, (alkyl)cycloalkyl, alkylalkoxy, alkenyl, or (un)substituted phenyl(alkyl); R3 = (un)substituted Ph; R4 and R5 = independently H, halo, OH, (cyclo)alkyl, alkoxy, CF3, OCF3, OCHF2, CF2CF3, CN, NO2, NH2, NH-alkylamine, or N,N-dialkylamine; R7 = alkyl, cycloalkyl(amino), alkoxy, or (un)substituted aryl or heterocyclyl; and pharmaceutically acceptable salts thereof] were prepared as steroid hormone nuclear receptor modulators. For example, alkylation of 3,3-bis[4-(tert-butyldimethylsilanyloxy)-3,5-dimethylphenyl]-1,3-dihydroindol-2-one with 4-methoxybenzyl chloride in the presence of t-BuOK in THF, followed by deprotection using Bu4NF in THF provided II (51%). The latter showed affinity for the human mineralocorticoid receptor (hMR) expressed in Sf9 insect cells with Ki ≤ 500 nM in competition expts. using [3H]-aldosterone as the specific ligand. In a whole cell binding assay using A549 human lung epithelial cells and [3H]-dexamethasone as the ligand, II also demonstrated modulation of glucocorticoid receptor (GR) activity with Ki ≤ 500 nM. Thus, I and their pharmaceutical compns. are useful for treating pathol. disorders susceptible to steroid hormone nuclear receptor modulation, particularly congestive heart failure.

IT **137-00-8**, 2-(4-Methylthiazol-5-yl)ethanol
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of indolones as glucocorticoid and mineralocorticoid receptor modulators for treatment of congestive heart failure and other conditions)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L72 ANSWER 10 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:472512 HCAPLUS
DOCUMENT NUMBER: 139:41838
TITLE: Sulfate salt of a **thiazolidinedione** derivative
INVENTOR(S): Craig, Andrew Simon; Ho, Tim Chien Ting
PATENT ASSIGNEE(S): Smithkline Beecham Plc, UK
SOURCE: PCT Int. Appl., 25 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2003050114	A1	20030619	WO 2002-GB5674	20021213

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2001-29871 A 20011213

AB A 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-**dione** sulfate salt, a process for preparing such a salt, a pharmaceutical composition containing such a salt and the antidiabetic use of such a salt in medicine are disclosed.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L72 ANSWER 11 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:454875 HCAPLUS
DOCUMENT NUMBER: 139:38559
TITLE: Coated particles, their manufacture and use
INVENTOR(S): Anderson, David M.
PATENT ASSIGNEE(S): Lyotropic Therapeutics, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 65 pp., Cont.-in-part of U.S. Ser. No. 297,997.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003108743	A1	20030612	US 2002-170237	20020613
US 6638621	B2	20031028		
US 6482517	B1	20021119	US 2000-297997	20000816

PRIORITY APPLN. INFO.: US 2000-297997 A2 20000816
US 1997-58309P P 19970909
WO 1998-US18639 W 19980908

AB A particle coated with a nonlamellar material such as a nonlamellar crystalline material, a nonlamellar amorphous material, or a nonlamellar semi-crystalline material includes an internal matrix core having ≥1 a nanostructured liquid phase or its dehydrated variant, or ≥1 nanostructured liquid crystalline phase or its dehydrated variant, or a combination of the 2 is used for the delivery of active agents such as pharmaceuticals, nutrients, pesticides, etc. The coated particle can be fabricated by a variety of different techniques where the exterior coating is a nonlamellar material such as a nonlamellar crystalline material, a nonlamellar amorphous material, or a nonlamellar semi-crystalline material.

IT **7783-06-4**, Hydrogen sulfide, uses
RL: NUU (Other use, unclassified); USES (Uses)
(coated particles for delivery or uptake of materials)

L72 ANSWER 12 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:154225 HCAPLUS
DOCUMENT NUMBER: 138:210299
TITLE: Mucoadhesive erodible drug delivery device for controlled administration of pharmaceuticals and other active compounds

INVENTOR(S): Moro, Daniel G.; Callahan, Howard; Nowotnik, David P.
PATENT ASSIGNEE(S): Access Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 46 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003015748	A2	20030227	WO 2002-US26083	20020816
WO 2003015748	A3	20031204		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003044446	A1	20030306	US 2001-931319	20010816
US 6585997	B2	20030701		
EP 1418889	A2	20040519	EP 2002-761390	20020816
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				

PRIORITY APPLN. INFO.: US 2001-931319 A 20010816
WO 2002-US26083 W 20020816

AB The present invention relates to a layered pharmaceutical delivery device for the administration of pharmaceuticals or other active compds. to mucosal surfaces. The device may also be used by itself without the incorporation of a therapeutic. The device of the present invention consists of a water-soluble adhesive layer, a non-adhesive, bioerodible backing layer and one or more pharmaceuticals if desired in either or both layers. Upon application, the device adheres to the mucosal surface, providing protection to the treatment site and localized drug delivery. The "Residence Time", the length of time the device remains on the mucosal surface before complete erosion, can be easily regulated by modifications of the backing layer.

IT **144-82-1**, Sulfamethizole
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(mucoadhesive erodible drug delivery device for controlled administration of pharmaceuticals and other active compds.)

L72 ANSWER 13 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:97928 HCAPLUS
DOCUMENT NUMBER: 138:149370
TITLE: Reversed micellar systems, and their use for gene delivery to parenchymal cells

INVENTOR(S): Monahan, Sean D.; Wolff, Jon A.; Slattum, Paul M.; Hagstrom, James E.; Budker, Vladimir G.

PATENT ASSIGNEE(S): Mirus Corp., USA
SOURCE: U.S. Pat. Appl. Publ., 21 pp., Cont.-in-part of U.S. 6,429,200.
CODEN: USXXCO

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003027339	A1	20030206	US 2002-81461	20020221
US 6673612	B2	20040106		
US 6429200	B1	20020806	US 1999-354957	19990716
US 2004023393	A1	20040205	US 2003-627247	20030725

PRIORITY APPLN. INFO.: US 1999-354957 A2 19990716
US 1998-93227P P 19980717
US 2002-81461 A3 20020221

AB Disclosed herein are methods of preparing a gene delivery complex comprising solubilizing a nucleic acid into a reversed micelle with an internal water volume for delivery to parenchymal cells. Compds., such as polycations, which compact the nucleic acid can be added for easier delivery. Other mols., such as a surfactant having a disulfide bond, are used to interact with the nucleic acid-micelle complex to further enhance gene delivery.

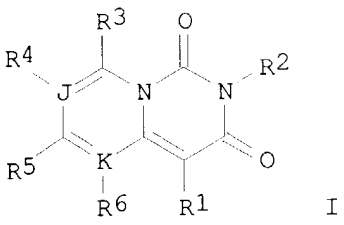
IT **7791-25-5, Sulfuryl** chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(reversed micellar systems, and their use for gene delivery to parenchymal cells)

L72 ANSWER 14 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:927430 HCAPLUS
DOCUMENT NUMBER: 138:14071
TITLE: Preparation of pyrido[1,2-c]pyrimidines as antibacterial agents effective against quinolone-resistant bacteria
INVENTOR(S): Ellsworth, Edmund Lee; Showalter, Howard Daniel Hollis; Hutchings, Kim Marie; Nguyen, Dai Quoc
PATENT ASSIGNEE(S): Warner-Lambert Company, USA
SOURCE: PCT Int. Appl., 168 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002096908	A1	20021205	WO 2002-IB1598	20020501
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1395585	A1	20040310	EP 2002-727861	20020501
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2002010099	A	20040413	BR 2002-10099	20020501
US 2003114458	A1	20030619	US 2002-157370	20020529

PRIORITY APPLN. INFO.: US 2001-294338P P 20010530
US 2002-365077P P 20020319
WO 2002-IB1598 W 20020501

OTHER SOURCE(S): MARPAT 138:14071
GI



I

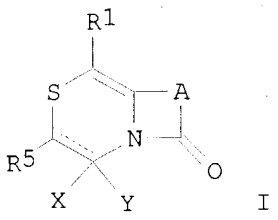
AB The present invention provides pyrido[1,2-c]pyrimidines (shown as I; see below for variable definitions; e.g. 2-amino-6-[(R)-3-(1-aminocyclopropyl)pyrrolidin-1-yl]-4-cyclopropyl-7-fluoro-5-methylpyrido[1,2-c]pyrimidine-1,3-**dione**) and pharmaceutically acceptable salt thereof, that are useful as antibacterial agents. Also disclosed are pharmaceutical compns. comprising ≥1 I, process for preparing I, and intermediates useful for preparing I. Methods of preparation are claimed and .apprx.18 example prepns. of I and intermediates are included. For example, 2-(4-chloro-5-fluoro-3-methyl-2-pyridinyl)cyclopropylacetonitrile was reacted with **sulfuric** and acetic acids at 100° for 2 h to give the acetamide, which was reacted with triphosgene and KOtBu in CH2Cl2 to give 6-chloro-4-cyclopropyl-7-fluoro-5-methylpyrido[1,2-c]pyrimidine-1,3-**dione**, which was reacted with NaH in THF/DMF followed by 2,4-dinitrophenylhydroxylamine to give 2-amino-6-chloro-4-cyclopropyl-7-fluoro-5-methylpyrido[1,2-c]pyrimidine-1,3-**dione**, which was reacted with substituted pyrrolidines in DMSO at 60° for 5 h to give products such as [(R)-1-[(R)-1-(2-amino-4-cyclopropyl-7-fluoro-5-methyl-1,3-dioxo-2,3-dihydro-1H-pyrido[1,2-c]pyrimidin-6-yl)pyrrolidin-3-yl]ethyl]carbamic acid tert-Bu ester. R1 is H or optionally substituted C1-C7 alkyl, C2-C7 alkenyl, C2-C7 alkynyl, C3-C7 cycloalkyl, aryl, heterocyclic, or heteroaryl. R2 is H, optionally substituted C1-C7 alkyl, C2-C7 alkenyl, C2-C7 alkynyl, C3-C7 cycloalkyl, aryl, heterocyclic, or heteroaryl, halo, NO2, NO, CN, ORa, O2CRa (Ra is H, optionally substituted C1-C7 alkyl, C2-C7 alkenyl, C3-C7 cycloalkyl, aryl, heteroaryl, heterocycloalkyl), CO2Rb, CS2Rb, C(O)Rb (Rb is H, optionally substituted C1-C7 alkyl, C2-C7 alkenyl, C3-C7 cycloalkyl, aryl, heteroaryl, heterocycloalkyl); C(O)NRcRd (Rc and Rd are independently H, optionally substituted C1-C7 alkyl, C2-C7 alkenyl, C3-C7 cycloalkyl, aryl, heteroaryl, heterocycloalkyl); NReRf (Re and Rf are each independently H, optionally substituted C1-C7 alkyl, C2-C7 alkenyl, C2-C7 alkynyl, C3-C7 cycloalkyl, C5-C8 cycloalkenyl, aryl, heteroaryl, or heterocycloalkyl, or CO2Rb, C(O)SRb, C(O)Rb, C(O)NRcRd; or Re and Rf are taken together with the N to which they are attached form a 4-8 membered ring having from 0 to 3 heteroatoms = N, O, and S, wherein said ring is optionally substituted by ≥1 substituents). R3, R4, and R6 independently are H, OH, optionally substituted (O)nC1-C7 alkyl, (O)nC2-C7 alkenyl, or (O)nC2-C7 alkynyl (n is 0 or 1), halo, NO2, CN, NReRf; or R1 and R6 taken together with the atoms to which they are attached form a 5-8 membered ring having from 0 to 3 heteroatoms = N, O, and S, wherein said ring is optionally substituted by ≥1 substituents. R5 is H, optionally substituted C1-C7 alkyl, C2-C7 alkenyl, C2-C7 alkynyl, ORa, O2CRb, CO2Rb, C(O)SRb, SRb, S(O)Rb, SO2ORb, SO2F, SO2CF3, C(O)Rb, C(O)NR3Rd, halo, NO2, CN, NReRf; aryl or fused aryl, heterocyclic or fused heterocyclic, heteroaryl or fused heteroaryl, bicyclic heterocyclic or spiro heterocyclic, wherein fused aryl, fused heterocyclic, fused heteroaryl, bicyclic heterocyclic, or spiro heterocyclic can be substituted; and wherein J and K independently are C or N, provided that when J or K is N, R4 or R6 is absent at that position. Seven I were tested against an assortment of Gram-neg. and Gram-pos. organisms using standard microtitration techniques and the results are compared to those for ciprofloxacin. The effects of two I on the activity of DNA gyrase were determined and compared to ciprofloxacin.

Four I were tested against an assortment of ciprofloxacin-resistant E. coli and S. aureus organisms. The I display Gram-neg. and Gram-pos. activity, show inhibition of bacterial DNA gyrase, demonstrate in vivo protective activity in mice and are not highly cytotoxic to mammalian cells indicating selectivity for bacteria.

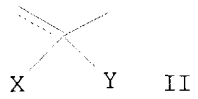
L72 ANSWER 15 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:888746 HCAPLUS
DOCUMENT NUMBER: 138:4599
TITLE: Preparation of fused imidazolidine derivatives as inhibitors of cartilage matrix degradation
INVENTOR(S): Funabashi, Yasunori; Takizawa, Masayuki; Morimoto, Shinji; Notoya, Kohei
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 940 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002092606	A1	20021121	WO 2002-JP4640	20020514
WO 2002092606	C1	20021219		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2003034691	A2	20030207	JP 2002-139642	20020515

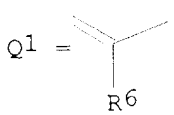
PRIORITY APPLN. INFO.: JP 2001-144608 A 20010515
OTHER SOURCE(S): MARPAT 138:4599
GI

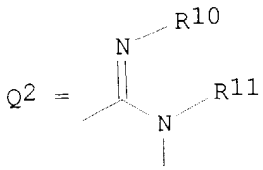


I



II





AB The title compds. I [R1 = (S)nR2, etc.; n = 0 - 2; R2 = H, (un)substituted hydrocarbon, etc.; R5 = H, (un)substituted hydrocarbon, etc.; the moiety represented by II in I is Q1, etc.; R6 = H, (un)substituted hydrocarbon, etc.; A = Q2, etc.; R10 = H, ZR15, etc.; Z = SO2, etc.; R15 =

(un)substituted hydrocarbon, etc.; R11 = H, (un)substituted hydrocarbon] are prepared A process for preparing I is disclosed. Compds. of this invention in vitro at 0.1 μM gave 20% to 55% inhibition of MMP-13 production Formulations are given.

IT **202289-38-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of fused imidazolidine derivs. as inhibitors of cartilage matrix degradation)

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L72 ANSWER 16 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:832560 HCAPLUS
DOCUMENT NUMBER: 137:333161
TITLE: Nociceptin analogs, their preparation, and their use in the treatment of pain
INVENTOR(S): Goehring, Richard R.; Chen, Zhengming; Kyle, Donald; Victory, Sam; Gharagozloo, Parviz; Whitehead, John
PATENT ASSIGNEE(S): Euro-Celtique, S.A., Luxembourg
SOURCE: PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002085291	A2	20021031	WO 2002-US12356	20020418
WO 2002085291	A3	20030220		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003013874	A1	20030116	US 2002-126507	20020418
EP 1379252	A2	20040114	EP 2002-731427	20020418
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRIORITY APPLN. INFO.:
US 2001-284674P P 20010418
US 2001-284676P P 20010418
WO 2002-US12356 W 20020418

OTHER SOURCE(S): MARPAT 137:333161

AB Piperidinylbenzothiadiazine-2,2-**dione** derivs. and piperidinylquinolin-2-one derivs. are disclosed (preparation described) which have affinity for opioid receptors, including the ORL1 receptor. The compds. of the invention are useful for the treatment of acute or chronic pain.

IT **7803-58-9**, Sulfamide
RL: RCT (Reactant); RACT (Reactant or reagent)
(piperidinylbenzothiadiazines and piperidinylquinolinones, preparation, and use in treatment of pain)

L72 ANSWER 17 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:754351 HCAPLUS
DOCUMENT NUMBER: 137:273236
TITLE: Quinone compound cysteine protease inhibitors, and therapeutic use

INVENTOR(S): Arad, Dorit; Bollon, Arthur P.; Young, David G.; Peek, Andrew S.; Poland, Bradley W.; Shaw, Bailin; Vallurupalli, Jyothi
PATENT ASSIGNEE(S): Exegenics Inc., USA
SOURCE: PCT Int. Appl., 106 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002076939	A2	20021003	WO 2002-US3785	20020205
WO 2002076939	A3	20031016		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-266412P P 20010205
US 2001-271216P P 20010223
OTHER SOURCE(S): MARPAT 137:273236

AB Compds. having quinone and quinone analogs useful for pharmaceutical prepns. have now been found which inhibit cysteine proteases, in particular, caspases and 3C cysteine proteases. The cysteine protease inhibitors of the invention can be identified by their mode of action in disrupting the ability of cysteine proteases and, in particular, caspases to cleave a peptide chain. These compds. are useful in inhibiting cysteine protease or cysteine protease-like proteins and for treating infectious diseases or physiopathol. diseases or disorders attributed to the presence of excessive or insufficient levels of cysteine proteases.

L72 ANSWER 18 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:332161 HCAPLUS
DOCUMENT NUMBER: 136:340538
TITLE: Production of sulphur-containing indirubin derivatives and their use in the treatment of cancer, cardiovascular and neurodegenerative diseases and viral infections
INVENTOR(S): Prien, Olaf; Steinmeyer, Andreas; Siemeister, Gerhard; Jautelat, Rolf
PATENT ASSIGNEE(S): Schering Aktiengesellschaft, Germany
SOURCE: PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002034717	A1	20020502	WO 2001-EP12007	20011017

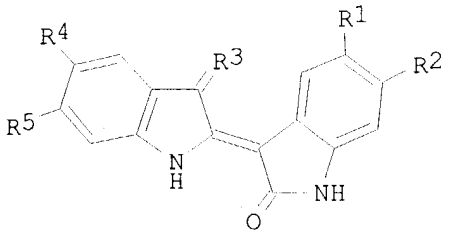
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,

VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10053474	A1	20020502	DE 2000-10053474	20001024
AU 2002010548	A5	20020506	AU 2002-10548	20011017
US 2002107404	A1	20020808	US 2001-983548	20011024

PRIORITY APPLN. INFO.: DE 2000-10053474 A 20001024
WO 2001-EP12007 W 20011017

OTHER SOURCE(S): MARPAT 136:340538
GI



I

AB Sulfonyl indirubin derivs., e.g., I [R1, R2 = H, halogen, OH, NO, NO2, C1-10-oxaalkoxy, C1-18-haloalkyl, C1-18-hydroxyalkyl, C1-18-aminoalkyl, S(O)nR6, O-glycoside, N-glycoside; R3 = O, S, Se, Te, NOR7, NR9; R4, R5 = H, halogen, OH, NO, NO2, C1-10-oxaalkoxy, C1-18-haloalkyl, C1-18-hydroxyalkyl, C1-18-aminoalkyl, COM, CO2M, CH2CO2M, , O-glycoside, N-glycoside; R6 = H, halogen, OH, C1-18-aminoalkyl; R7 = H, C1-18-oxaalkyl, C2-18-oxaalkenyl, C1-18-oxacycloalkyl, C1-18-oxacycloalkenyl; R9 = H, CO2H, phosphoryl, sulfonate; n = 0 - 2; M = H, alkyl], their optical isomers and salts, the production thereof, the intermediates in the production thereof and the use thereof as a medicament for the treatment of cancer, such as concrete tumors and leukemias; auto-immune diseases, such as psoriasis, alopecia and multiple sclerosis; chemotherapeutically-induced alopecia and mucositis; are disclosed. Indirubin derivs. I and the use thereof as a medicament for the treatment of infectious diseases such as, for example, caused by uni-cellular parasites such as trypanosoma, toxoplasma or plasmodium, or nephrol. diseases caused by fungi such as, for example, cardiovascular diseases, such as stenoses, arteriosclerosis and restenoses glomerulonephritis; chronic neurodegenerative diseases such as Huntington's disease, amyotrophic lateral scleroses, Parkinson's disease, AIDS dementia and Alzheimer's disease; acute neurodegenerative diseases such as cerebral ischemia and neurol. traumas and viral infections, such as for example cytomegalovirus infections, herpes, hepatitis B and C, and HIV diseases are also disclosed. Thus, I (R1 = SMe, R2 = R4 = R5 = H, R3 = O), was prepd, from 5(methylthio)-1H-indole-2,3-**dione** via condensation with indoxyl acetate in MeOh containing Na2CO3. The pharmacol. of I (R1 = SMe, R2 = R4 = R5 = H, R3 = O) was determined [IC50 = 0.3 μM vs. CDK2; IC50 = 0.5 μM vs. MCF-7 cells].

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L72 ANSWER 19 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:31225 HCAPLUS
DOCUMENT NUMBER: 136:90966
TITLE: Crosslinked high amylose starch for use in controlled-release pharmaceutical formulations and processes for its manufacture

INVENTOR(S): Lenaerts, Vincent; Beck, Roland Herwig Friedrich; Van Bogaert, Elsie; Chouinard, Francois; Hopcke, Reiner; Desevaux, Cyril
PATENT ASSIGNEE(S): Can.
SOURCE: PCT Int. Appl., 65 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002002084	A1	20020110	WO 2001-US20319	20010626
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6607748	B1	20030819	US 2000-606399	20000629
EP 1305009	A1	20030502	EP 2001-950498	20010626
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001012140	A	20031007	BR 2001-12140	20010626
JP 2004501957	T2	20040122	JP 2002-506706	20010626
NO 2002006254	A	20030227	NO 2002-6254	20021227
US 2004013726	A1	20040122	US 2003-619983	20030714

PRIORITY APPLN. INFO.: US 2000-606399 A 20000629
WO 2001-US20319 W 20010626

AB The present invention relates to a novel form of crosslinked high amylose starch and process for its manufacture Such crosslinked high amylose starch is useful as an excipient in a controlled-release pharmaceutical formulation when compressed with a pharmaceutical agent(s) in a tablet. Such crosslinked high amylose starch is prepared by (a) crosslinking and chemical modification of high amylose starch, (b) gelatinization, and (c) drying to obtain a powder of said controlled release excipient. In a preferred embodiment, such crosslinked high amylose starch is prepared in following steps: (1) granular crosslinking and addnl. chemical modification (e.g., hydroxypropylation) of high- amylose starch; (2) thermal gelatinization of the starch from step (1); and (3) drying the starch from step (2) to yield a powder capable of being used as a controlled-release excipient. A crosslinked starch was prepared according to above method with moisture content of 4.5%, bulk d. of 150 g/L, packed d. of 210 g/L, pH of = 5.4, and particle size peak value of 50 μm. A tablet contained tramadol hydrochloride 42.5, above starch 56.3, talc 1, and silica 0.2% in the core; and tramadol hydrochloride 21.25, above starch 57.55 talc 1, and xanthan gum 20% in the coating.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L72 ANSWER 20 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:730558 HCAPLUS
DOCUMENT NUMBER: 135:278041
TITLE: Antiviral therapeutic composition
INVENTOR(S): Allen, Loyd V., Jr.; Benkendorfer, Travis T.
PATENT ASSIGNEE(S): Viron Corporation, Switz.
SOURCE: PCT Int. Appl., 17 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001072312	A1	20011004	WO 2000-US35149	20001222
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002009490	A1	20020124	US 2000-747827	20001222

PRIORITY APPLN. INFO.: US 1999-171697P P 19991222

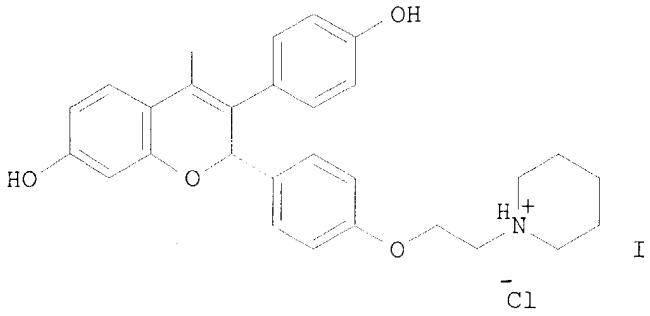
AB This invention discloses an antiviral therapeutic composition containing Viron, which can be used to treat human viral infections. A method of preparing sintered Viron tablets comprised blending the Viron powder, germanium sesquioxide, citric acid, sodium bicarbonate, polyethylene glycol and flavor together until uniform; placing tablet blend in a plastic blister mold, tamping the tablet blend gently, heating a plastic blister mold containing the tablet blend in an oven at 90° for 10-12 min for the sintering process to occur, removing the plastic blister mold from the oven, placing the plastic blister mold in a refrigerator for 5 min, dropping approx. 50 μL of a solution of the human α-interferon onto the formed tablet, and allowing the tablet to dry under gentle moving air.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L72 ANSWER 21 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:283784 HCAPLUS
DOCUMENT NUMBER: 134:305328
TITLE: Selective estrogen receptor modulators in the treatment or reduction of the risk of acquiring hypertension, cardiovascular diseases, and insulin resistance
INVENTOR(S): Labrie, Fernand; Marette, Andre
PATENT ASSIGNEE(S): Endorecherche, Inc., Can.
SOURCE: PCT Int. Appl., 62 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001026651	A2	20010419	WO 2000-CA1222	20001013
WO 2001026651	A3	20011108		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 1999-159359P P 19991014
OTHER SOURCE(S): MARPAT 134:305328
GI



AB Methods are provided for the medical treatment and/or inhibition of the development of hypertension, cardiovascular diseases, insulin resistance, and diabetes in susceptible warm-blooded animals, including humans, involving administration of a selective estrogen receptor modulator, e.g. EM-652.HCL (I).

L72 ANSWER 22 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:47237 HCAPLUS
DOCUMENT NUMBER: 135:277841
TITLE: Compatibility between sustained-release fine granules of nifedipine and other drugs (2)
AUTHOR(S): Yagi, Naomi; Sekikawa, Hitoshi; Ishikawa, Yoko; Saijo, Kazuyoku; Nishihana, Masaki; Katakura, Michihiro; Watanabe, Toshifumi; Itaya, Koichi
CORPORATE SOURCE: Faculty of Pharmacentical Sciences, Health Sciences University of Hokkaido, Tobetsu-cho, Ishikari-gun, Hokkaido, 061-0293, Japan
SOURCE: Byoin Yakugaku (2000), 26(6), 625-631
CODEN: BYYADW; ISSN: 0389-9098
PUBLISHER: Nippon Byoin Yakugakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB The compatibility of combining sustained-release fine granules of nifedipine (SRN) with 32 kinds of drugs was studied. The mixts. of SRN and drugs in heat-sealed packages (polyethylene-laminated glassine paper) were kept at either 20° and 75% relative humidity (R. H.) or 30° and 92% R. H. for 30 days, resp. Any changes in the color or weight of the samples were recovered. Dissoln. tests of nifedipine from the mixts. of SRN and drugs were studied in J.P. disintegration media Number 1 and Number 2. The dissoln. of nifedipine was slightly enhanced in mixts. containing sodium bicarbonate in the disintegration medium Number 1. However, no significant incompatibility was observed in the weight change, and no significant change was seen in the dissoln. of nifedipine.
IT **144-82-1**, Urocydal
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compatibility between sustained-release fine granules of nifedipine and other drugs)

L72 ANSWER 23 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:456867 HCAPLUS
DOCUMENT NUMBER: 133:84284
TITLE: A combination of fructose-1,6-bisphosphatase (FBPase) inhibitors and insulin sensitizers for the treatment of diabetes
INVENTOR(S): Erion, Mark D.; Vanpoelje, Paul
PATENT ASSIGNEE(S): Metabasis Therapeutics, Inc., USA

SOURCE: PCT Int. Appl., 306 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000038666	A2	20000706	WO 1999-US30713	19991222
WO 2000038666	A3	20011129		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1143955	A2	20011017	EP 1999-964313	19991222
EP 1143955	A3	20020828		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9917005	A	20020402	BR 1999-17005	19991222
JP 2003515523	T2	20030507	JP 2000-590620	19991222
AU 771039	B2	20040311	AU 2000-20583	19991222
RU 2227749	C2	20040427	RU 2001-120726	19991222
ZA 2001005016	A	20020919	ZA 2001-5016	20010619
NO 2001003115	A	20010824	NO 2001-3115	20010621

PRIORITY APPLN. INFO.: US 1998-114718P P 19981224
WO 1999-US30713 W 19991222

OTHER SOURCE(S): MARPAT 133:84284

AB Pharmaceutical compns. containing an FBPase inhibitor and an insulin sensitizer are provided as well as methods for treating diabetes and diseases responding to increased glycemic control, an improvement in insulin sensitivity, a reduction in insulin levels, or an enhancement of insulin secretion.

IT **7719-09-7**, Thionyl chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction; fructose-1,6-bisphosphatase inhibitor-insulin sensitizer combination for diabetes treatment, and inhibitor preparation)

L72 ANSWER 24 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:441571 HCAPLUS
DOCUMENT NUMBER: 133:57991
TITLE: Use of N-neohexyl-α-aspartyl-L-phenylalanine methyl ester as a flavor modifier
INVENTOR(S): Gerlat, Paula A.; Hatchwell, Leora C.; Walters, Gale C.; Miraglio, Angela; Sawyer, Harold A.
PATENT ASSIGNEE(S): The Nutrasweet Company, USA
SOURCE: PCT Int. Appl., 87 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000036933	A1	20000629	WO 1999-US29851	19991217
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,				

IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2003008046 A1 20030109 US 1999-465837 19991217
PRIORITY APPLN. INFO.: US 1998-112948P P 19981218

AB This invention relates to the use of N-[N-(3,3-dimethylbutyl)-L-α-aspartyl]-L-phenylalanine 1-Me ester, or neotame, as a flavor (taste and/or aroma) modifier in foods, cosmetics and drugs, and compns. containing the same.

IT **137-00-8, Sulfurol**
RL: BPR (Biological process); BSU (Biological study, unclassified); FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(use of N-neohexyl-α-aspartyl-L-phenylalanine Me ester as a flavor and aroma modifier)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L72 ANSWER 25 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:259972 HCAPLUS
DOCUMENT NUMBER: 132:293042
TITLE: Encapsulation of sensitive liquid components into a matrix to obtain discrete shelf-stable particles
INVENTOR(S): Van Lengerich, Bernhard H.
PATENT ASSIGNEE(S): General Mills, Inc., USA
SOURCE: PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000021504	A1	20000420	WO 1999-US20905	19991006
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2345815	AA	20000420	CA 1999-2345815	19991006
AU 9963872	A1	20000501	AU 1999-63872	19991006
EP 1119345	A1	20010801	EP 1999-951433	19991006
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002527375	T2	20020827	JP 2000-575480	19991006

PRIORITY APPLN. INFO.:
US 1998-103700P P 19981009
US 1998-109696P P 19981124
US 1999-233443 A 19990120
WO 1999-US20905 W 19991006

AB A liquid encapsulant component which contains an active, sensitive encapsulant, such as a live microorganism or an enzyme dissolved or dispersed in a liquid plasticizer is admixed with a plasticizable matrix material. The matrix material is plasticizable by the liquid plasticizer and the encapsulation of the active encapsulant is accomplished at a low

temperature and under low shear conditions. The active component is encapsulated and/or embedded in the plasticizable matrix component or material in a continuous process to produce discrete, solid particles. The liquid content of the liquid encapsulant component provides substantially all or completely all of the liquid plasticizer needed to plasticize the matrix component to obtain a formable, extrudable, cuttable, mixture or dough. Removal of liquid plasticizer prior to extrusion is not needed to adjust the viscosity of the mixture for formability. Release of an active component from the matrix may be delayed or controlled over time so that the active component is delivered when and where it is needed to perform its intended function. Controlled release, discrete, solid particles which contain an encapsulated and/or embedded component such as a heat sensitive or readily oxidizable pharmaceutically, biol., or nutritionally active component are continuously produced without substantial destruction of the matrix material or encapsulant.

IT **144-82-1**, Sulfamethizole
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(encapsulation of sensitive liquid components into matrix to obtain discrete shelf-stable particles)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L72 ANSWER 26 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:766507 HCAPLUS
DOCUMENT NUMBER: 130:29221
TITLE: Preparation of solid porous matrixes for pharmaceutical uses
INVENTOR(S): Unger, Evan C.
PATENT ASSIGNEE(S): ImaRx Pharmaceutical Corp., USA
SOURCE: PCT Int. Appl., 139 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9851282	A1	19981119	WO 1998-US9570	19980512
W: AU, BR, CA, CN, JP, KR, NZ				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 2002039594	A1	20020404	US 1998-75477	19980511
AU 9873787	A1	19981208	AU 1998-73787	19980512
EP 983060	A1	20000308	EP 1998-921109	19980512
R: DE, FR, GB, IT, NL				
US 2001018072	A1	20010830	US 2001-828762	20010409
US 2004091541	A1	20040513	US 2003-622027	20030716

PRIORITY APPLN. INFO.:
US 1997-46379P P 19970513
US 1998-75477 A 19980511
WO 1998-US9570 W 19980512
US 2001-828762 B1 20010409

AB A solid porous matrix formed from a surfactant, a solvent, and a bioactive agent is described. Thus, amphotericin nanoparticles were prepared by using ZrO2 beads and a surfactant. The mixture was milled for 24 h.

IT **421-83-0**, Trifluoromethanesulfonyl chloride **2551-62-4**, **Sulfur** hexafluoride **5714-22-7**, **Sulfur** fluoride (S2F10)
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of solid porous matrixes for pharmaceutical uses)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L72 ANSWER 27 OF 27 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:293427 HCAPLUS
DOCUMENT NUMBER: 129:8597
TITLE: Embedding and encapsulation of controlled release particles
INVENTOR(S): Van Lengerich, Bernhard H.
PATENT ASSIGNEE(S): Van Lengerich, Bernhard H., USA
SOURCE: PCT Int. Appl., 63 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9818610	A1	19980507	WO 1997-US18984	19971027
W: AU, CA, JP, NO, PL, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9749915	A1	19980522	AU 1997-49915	19971027
AU 744156	B2	20020214		
EP 935523	A1	19990818	EP 1997-912825	19971027
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002511777	T2	20020416	JP 1998-520558	19971027
EP 1342548	A1	20030910	EP 2003-10031	19971027
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
NO 9902036	A	19990428	NO 1999-2036	19990428

PRIORITY APPLN. INFO.:
US 1996-29038P P 19961028
US 1997-52717P P 19970716
EP 1997-912825 A3 19971027
WO 1997-US18984 W 19971027

AB Controlled release, discrete, solid particles which contain an encapsulated and/or embedded component such as a heat sensitive or readily oxidizable pharmaceutically, biol., or nutritionally active component are continuously produced without substantial destruction of the matrix material or encapsulant. A release-rate controlling component is incorporated into the matrix to control the rate of release of the encapsulant from the particles. The addnl. component may be a hydrophobic component or a high water binding capacity component for extending the release time. The plasticizable matrix material, such as starch, is admixed with at least one plasticizer, such as water, and at least one release-rate controlling component under low shear mixing conditions to plasticize the plasticizable material without substantially destroying the at least one plasticizable material and to obtain a substantially homogeneous plasticized mass. The plasticizer content is substantially reduced and the temperature of the plasticized mass is substantially reduced prior to admixing the plasticized mass with the encapsulant to avoid substantial destruction of the encapsulant and to obtain a formable, extrudable mixture The mixture is extruded though a die without substantial or essentially no expansion and cut into discrete, relatively dense particles. Release properties may also be controlled by precoating the encapsulant and/or coating the extruded particles with a film-forming component. An example of encapsulation of acetylcysteine is given using starch, polyethylene, glycerol monostearate, and vegetable oil.

IT **144-82-1**, Sulfamethizole
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(embedding and encapsulation of controlled release particles)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT